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(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS  
(GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH  
ANTIGENIC PEPTIDES

5 CROSS-REFERENCE TO RELATED APPLICATIONS

[1] The present application claims priority from United States provisional patent application No. 60/257,144, filed December 19, 2000 and presently pending.

TABLE OF CONTENTS

[2] The following is a Table of Contents to assist review of the present application:

10 CROSS-REFERENCE TO RELATED APPLICATIONS

TABLE OF CONTENTS

BACKGROUND

SUMMARY

BRIEF DESCRIPTION OF THE DRAWING

15 DETAILED DESCRIPTION

A. INTRODUCTION AND OVERVIEW

B. DEFINITIONS

C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRS AND  
OTHER POLYPEPTIDES

20 D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO  
PARTICULAR GPCRS

ANTIGENIC PEPTIDES GENERALLY:

EXPRESSION PROFILES BASED ON PROTEINS:

SCREENING FOR ACTIVITY:

25 PROTEIN PURIFICATION:

E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND  
OTHER SYSTEMS AND ASPECTS, OF THE INVENTION

1. SYSTEMS AND METHODS FOR SCREENING FOR A  
PARTICULAR GPCR OR ANTIGENIC PEPTIDE

30 SCREENING FOR ANTIGENIC PEPTIDES:

SCREENING FOR/WITH ANTIGENIC PEPTIDES:

LIST OF ASSAYS:

ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):

IMMUNOFLUORESCENCE ASSAY:

35 BEAD AGGLUTINATION ASSAYS:

ENZYME IMMUNOASSAYS:

SANDWICH ASSAY:

SEQUENTIAL AND SIMULTANEOUS ASSAYS:

IMMUNOSTICK (DIP-STICK) ASSAYS:

40 IMMUNOCHROMATOGRAPHIC ASSAYS:

IMMUNOFILTRATION ASSAYS:

BIOSENSOR ASSAYS:



## 2. ANTIBODIES

ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE  
AND ITS CORRESPONDING GPCR:

ANTIBODIES GENERALLY:

5 ANTI-IDIOTYPIC ANTIBODIES:

### a. Antibody Preparation

#### (i) Polyclonal Antibodies

ANTIBODY PREP - POLYCLONAL:

ANTIBODY PREP - ADJUVANTS (ALL ABS):

10 (ii) Monoclonal Antibodies

ANTIBODY PREP - MONOCLONAL:

MOABS - COMBINATORIAL:

HUMANIZED MOAB:

15 ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES  
(ALL ABS):

CHIMERICS:

ANTIBODY LABELING (ALL ABS):

#### (iii) Humanized And Human Antibodies

HUMANIZED AB GENERALLY:

20 (iv) Antibody Fragments

ANTIBODY FRAGMENTS:

#### (v) Bispecific Antibodies

BISPECIFIC ANTIBODIES GENERALLY:

ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:

25 ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":

ANTIBODIES - DIABODIES:

ANTIBODIES - OTHER:

### b. Antibody Purification

ANTIBODY PURIFICATION GENERALLY:

30 BEFORE LPHIC:

LPHIC:

POST LPHIC:

### c. Some Uses For Antibodies Described Herein

#### (i) Generally

35 GENERALLY:

ASSAYS:

DIAGNOSTIC USES:

#### (ii) Assays

ASSAYS:

40 COMPETITIVE BINDING ASSAYS:

#### (iii) Affinity Purification

AFFINITY PURIFICATION:

#### (iv) Therapeutics

THERAPEUTIC USES:

45 THERAPEUTIC FORMULATIONS:

THERAPEUTIC FORMULATIONS -STERILE:

THERAPEUTIC ADMINISTRATIONS:

THERAPEUTIC ADMINISTRATIONS – SUSTAINED RELEASE-POLYMERS:  
THERAPEUTIC ADMINISTRATIONS – SUSTAINED RELEASE-LIPOSOMES:  
THERAPEUTICALLY EFFECTIVE AMOUNT:

5 5. DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR  
ANTIBODIES THERETO  
DISEASE/CONDITIONS LIST:

EXAMPLES

SEQUENCE LISTING:

CLAIMS

10 ABSTRACT  
[3]

## BACKGROUND

[4] G protein-coupled receptors (GPCRs) are a large group of proteins that transmit signals across cell membranes. In general terms, GPCRs function somewhat like doorbells.  
15 When a molecule outside the cell contacts the GPCR (pushes the doorbell), the GPCR changes its shape and activates "G proteins" inside the cell (similar to the doorbell causing the bell to ring inside the house, which in turn causes people inside to answer the door). GPCRs are like high-security doorbells because each GPCR responds to only one specific kind of signaling molecule (called its "endogenous ligand"), kind of like a high-tech door  
20 lock that responds to only one fingerprint. Part of the GPCR is located outside the cell (the "extracellular domain"), part spans the cell's membrane (the "transmembrane domain"), and part is located inside the cell (the "intracellular domain"). Thus, GPCRs are embedded in the outer membrane of a cell and recognize and bind certain signaling molecules that are present in the spaces surrounding the cell. GPCRs are used by cells to keep an eye on the cells' own  
25 activity and on the environment. In organisms that have many cells, the cells use GPCRs to talk to each other.

[5] GPCRs are important to the pharmaceutical industry and other industries. For example, many drugs, including some antibody-based drugs, act by binding to specific GPCRs and initiating or inhibiting their intracellular actions, and diagnostics and therapeutics  
30 based on GPCRs or on antibodies for GPCRs are becoming increasingly important.

[6] General concepts about GPCRs are discussed in more scientific terms in the following paragraphs.

[7] The GPCR superfamily has at least 250 members, Strader et al., FASEB J., 9:745-754 (1995); Strader et al., Annu. Rev. Biochem., 63:101-32 (1994). GPCRs play important

roles in diverse cellular processes including cell proliferation and differentiation, leukocyte migration in response to inflammation, gene transcription, vision (the rhodopsins), smell (the olfactory receptors), neurotransmission (muscarinic acetylcholine, dopamine, and adrenergic receptors), and hormonal response (luteinizing hormone and thyroid-stimulating hormone receptors). Strader et al., *supra*; U.S. Patent nos. 5,994,097 and 6,063,596. Many important drugs produce their therapeutic actions through their interaction with GPCRs.

[8] Nucleotide and amino acid sequences for many GPCRs have been reported and can be found in public databases such as GenBank and GenPept. Generally speaking, different GPCRs show both structural and sequence similarities. The most conserved domains of GPCRs are the transmembrane domains and the first two cytoplasmic loops. GPCRs range in size from under 400 to over 1000 amino acids. Coughlin, S. R., *Curr. Opin. Cell Biol.* 6:191-197 (1994). They contain seven hydrophobic transmembrane regions that span the cellular membrane and form a bundle of antiparallel alpha helices. McKee K.K., *supra*. The bundle of helices forming the transmembrane regions provide many structural and functional features of the receptor. In most cases, the bundle of helices form a pocket that binds a signaling molecule. However, when the binding site accommodates larger molecules, the extracellular N-terminal segment or one or more of the three extracellular loops participate in binding and in subsequent induction of conformational change in the intracellular portions of the receptor. These helices are joined at their ends by three intracellular and three extracellular loops. GPCRs also contain cysteine disulfide bridges between the second and third extracellular loops, an extracellular N-terminus, and a cytoplasmic or intracellular C-terminus. The N-terminus is often glycosylated, while the C-terminus is generally phosphorylated. A conserved, acidic-Arg-aromatic triplet present in the second cytoplasmic loop may interact with G Proteins. Most GPCRs contain a characteristic consensus pattern. Watson, S. and S. Arkinstall, *The G protein Linked Receptor Facts Book*, Academic Press, San Diego, CA (1994); Bolander, F. F. *Molecular Endocrinology*, Academic Press, San Diego, CA (1994).

[9] Although GPCRs have many features in common, each GPCR has its own unique characteristics as well. GPCRs have varying nucleotide and amino acid sequences, and varying antigenicity. GPCRs bind a diverse array of specific, extracellular signaling molecules (which can also be referred to as "ligands") including peptides, cytokines, hormones, neurotransmitters, growth factors, and specialized stimuli such as photons,

flavorants, and odorants. Identified ligands include, for example, purines, nucleotides (*e.g.*, adenosine, cAMP, NTPs), biogenic amines (*e.g.*, epinephrine, norepinephrine, dopamine, histamine, noradrenaline, serotonin), acetylcholine, peptides (*e.g.*, angiotensin, calcitonin, chemokines, corticotropin releasing factor, galanin, growth hormone releasing hormone, gastric inhibitory peptide, glucagon, neuropeptide Y, neurotensin, opioids, thrombin, secretin, somatostatin, thyrotropin releasing hormone, vasopressin, vasoactive intestinal peptide), lipids and lipid-based compounds (*e.g.*, cannabinoids, platelet activating factor), excitatory and inhibitory amino acids (*e.g.*, glutamate, GABA), ions (*e.g.*, calcium), and toxins.

[10] In general, a GPCR binds only one type of signaling molecule and GPCRs are classified according to subfamilies based upon their selectivity and specificity for a particular ligand. When the ligand for a receptor is not known, the receptor is known as an orphan receptor. The extracellular domain interacts with or binds to certain signaling molecules or ligands located outside of the cell. The binding of a ligand to the extracellular domain alters the conformation of the receptor's intracellular domain causing the activation of a G protein. The G protein then activates or inactivates a separate plasma-membrane-bound enzyme or ion channel. This chain of events alters the concentration of one or more intracellular messengers (second messengers) such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or  $\text{Ca}^{2+}$ . These, in turn, alter the activity of other intracellular proteins such as cAMP-dependent protein kinase and  $\text{Ca}^{2+}$ /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal. Baldwin, J.M., Curr. Opin. Cell Biol. 6:180-190 (1994). The G protein is deactivated by hydrolysis of GTP by GTPase. U.S. Patent Nos. 5,994,097 and 6,063,596.

[11] GPCR mutations, both of the loss-of-function and of the activating variety, have been associated with numerous human diseases, Coughlin, *supra*. For example, retinitis pigmentosa may arise from either loss-of-function or activating mutations in the rhodopsin gene. Somatic activating mutations in the thyrotropin receptor cause hyperfunctioning thyroid adenomas, Parma, J. et al., Nature 365:649-651 (1993). Parma et al. indicate that it may be possible that certain G protein-coupled receptors susceptible to constitutive activation may behave as proto-oncogenes. Interestingly, GPCRs have functional homologues in human cytomegalovirus and herpesvirus, so GPCRs may have been acquired during evolution for viral pathogenesis, Strader et al., FASEB J., 9:745-754 (1995); Arvanitakis et al., Nature, 385:347-350 (1997); Murphy, Annu. Rev. Immunol. 12:593-633 (1994). The

importance of the GPCR superfamily is further highlighted by the recent discoveries that some of its family members, the chemokine receptors CXCR4/Fusin and CCR5, are co-receptors for T cell-tropic and macrophage-tropic HIV virus strains, respectively, Alkhatib et al., Science, 272:1955 (1996); Choe et al., Cell, 85:1135 (1996); Deng et al., Nature, 381:661 (1996); Doranz et al., Cell, 85:1149 (1996); Dragic et al., Nature, 381:667 (1996); Feng et al., Science, 272:872 (1996). It is conceivable that blocking these receptors may prevent infection by the human immunodeficiency (HIV) virus. Other GPCR-related items include regulating cellular metabolism and diagnosing, treating and preventing particular diseases associated with particular GPCRs.

10 [12] One important way to evaluate GPCRs and antibodies for GPCRs as novel drug targets and for other purposes such as diagnostics is through the creation and use of databases. Such databases can provide large amounts of information about genes, proteins, and other biological matter. An excellent example of such a database is the GPCR database created and maintained by LifeSpan BioSciences, Inc., Seattle, Washington, USA, which  
15 database is available by subscription to researchers and others needing such information. The information in the databases can, for example, be searched, compared, and analyzed. The compilation of such databases, as well as the searching, comparing, etc., of the databases, can be referred to as the field of "bioinformatics." Investigations largely related to genes, such as the information found from the sequencing of the human genome, can be called "genomics"  
20 while similar activities on proteins can be called "proteomics."

[13] There has gone unmet a need for improved systems, compositions, methods, and the like relating to improved antigenicity of peptides from GPCRs and antibodies relating thereto. The present invention provides these and other advantages.

#### SUMMARY

25 [14] The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention  
30 provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known

antibodies. The present invention also provides improved methods of selecting antigenic peptides from any desired protein or polypeptide, as well as antigenic peptides so produced and antibodies against such antigenic peptides.

[15] The antigenic peptides and antibodies herein can be used, for example, to detect the presence or absence of corresponding GPCRs. They can be used to diagnose a variety of diseases and disorders in which GPCRs are involved, such as, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocyoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[16] The association of particular GPCRs with particular diseases, disorders or conditions will be apparent to a person of ordinary skill in the art in view of the present application, and thus the association with the antibodies of the present invention to the corresponding diseases, disorders or conditions.

5 [17] Thus, in one aspect the present invention provides isolated antigenic peptides according to any one of SEQ ID NOS. 692-2292. The isolated antigenic peptides also comprise an amino acid sequences that are at least about 90% or 95% identical to such sequences, or be an analog of such sequences, or comprise a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids set forth in any one of such  
10 sequences or contain no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any of such sequences. The present invention also provides antibodies, particularly isolated antibody having high specificity and high affinity or avidity for a particular GPCR or other target polypeptide or protein, generated using the antigenic peptides discussed herein.

15 [18] The present invention also provides isolated nucleic acid molecules encoding an antigenic peptide or antibody as described herein. The molecule can encode a naturally occurring human antigenic peptide. In some embodiments, the present invention provides processes for producing an isolated polynucleotide can comprise hybridizing a nucleotide encoding an antigenic peptide as discussed herein to DNA such as genomic DNA under  
20 stringent or highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

[19] The present invention also provides kits and assays, such as kits for the detection of antibodies against a particular GPCR or other target polypeptide in a sample comprising: a) an isolated antigenic peptide as discussed herein and derived from the particular GPCR, and  
25 b) at least one of a reagent or a device for detecting the antibodies, or comprising: a) an isolated antibody as described herein, and b) at least one of a reagent or a device for detecting the antibody. The assays include detection of a particular GPCR in a sample, comprising: a) providing an isolated antigenic peptide, b) contacting the isolated antigenic peptide corresponding to the particular GPCR with the sample under conditions suitable and for a  
30 time sufficient for the antigenic peptide to bind to one or more antibodies specific for the target protein present in the sample, to provide an antibody-bound target protein, and c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the

sample contains the particular GPCR. The assays can further comprise the step of binding the isolated antigenic peptide or the antibody to a solid substrate, and the sample can be an unpurified sample, for example from a human being.

[20] The assay can be selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

10 [21] In other aspects, the present invention provides methods of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence such as a polypeptide or protein wherein the antigenic peptide has a length of about 5 to about 100 amino acids, typically 6 amino acids to about 50 amino acids, and preferably 7 amino acids to about 20 amino acids. The methods comprise: a) searching the candidate polypeptide  
15 sequence using a comparison window of the length, and b) selecting against amino acid sequences of the length and having at least 1 to 3 or 4 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8)  
20 tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, the method comprises selecting against at least 5 to all of the characteristics.

[22] The methods can comprise, independently or in addition, selecting against amino acid sequences of the desired length having at least one of the following characteristics 1) sequences having at least 5 consecutive amino acids that are identical to an alternative amino  
25 acid sequence from an alternative polypeptide that can be different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences. The posttranslational modification sites can be phosphorylation or glycosylation sites. The methods can also comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

30 [23] These and other aspects, features, and embodiments are set forth within this application, including the following Detailed Description and attached drawings. The present invention comprises a variety of aspects, features, and embodiments; such multiple aspects,



features, and embodiments can be combined and permuted in any desired manner. In addition, various references are set forth herein, including in the Cross-Reference To Related Applications, that discuss certain compositions, apparatus, methods, or other information; all such references are incorporated herein by reference in their entirety and for all their teachings and disclosures, regardless of where the references may appear in this application.

#### BRIEF DESCRIPTION OF THE DRAWING

[24] Figure 1 depicts representative examples of the nucleotide and amino acid sequences of the GPCRs for which antigenic peptides are set forth herein, SEQ ID NOS. 1 - 691.

10 [25] Figure 2 depicts amino acid sequences for the antigenic peptides for the GPCRs herein, SEQ ID NOS. 692-2292.

[26] Figure 3 depicts a listing of GPCRS for which commercially available antibodies are putatively available.

#### DETAILED DESCRIPTION

##### 15 A. INTRODUCTION AND OVERVIEW

[27] Diseases such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases are serious health problems in the modern world. Any improvement in the diagnosis, treatment or other remediation of such diseases is a significant advance for millions of people. The present invention provides methods of identifying and selecting desirable antigenic peptides for GPCRs and other desired target or candidate proteins and polypeptides. The present invention also provides the antigenic peptides themselves, as well as antibodies against the antigenic peptides (and against proteins or polypeptides containing such antigenic peptides), and related diagnostics, antibody-based therapeutics directed to certain diseases and conditions, and other helpful compositions, systems, kits, assays and the like. The compositions, methods, and the like can be useful, for example, as agonists, antagonists, probes, and otherwise as may be desired.

[28] The antigenic peptides have been carefully selected using specific selection criteria and methodologies set forth herein to take advantage of particularly advantageous regions of the GPCRs from which they have been derived to provide unusually specific and

immunogenic antigens. These antigenic peptides are particularly useful for producing highly specific antibodies against the antigenic peptides, which, in turn, also means antibodies that are highly specific for the corresponding GPCRs containing the antigenic peptides. Accordingly, the antigenic peptides of the present invention, and the antibodies produced  
 5 therefrom, are particularly useful for high specificity, low noise diagnostics and, in the case of the antibodies, for certain antibody-based therapeutics, as well as methods, kits, systems, and the like incorporating or based on such antigenic peptides or antibodies.

[29] The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can  
 10 selectively detect the corresponding GPCR in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected.

15 [30] The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

[31] Figure 1 sets forth the DNA and protein sequences for the GPCRs from which the  
 20 antigenic peptides of the present invention were derived SEQ ID NOS. 1-691. Figure 2 sets forth the amino acid sequences of exemplary antigenic peptides, SEQ ID NOS. 692-2292. The sequences in Figures 1 and 2 are listed according to SEQ ID NO and LSID, which is an identification number assigned to the given sequence in the LifeSpan Biosciences databases. The sequences in Figure 2 also include an identifier LPID, which is also an identification  
 25 number assigned to the given sequence in the LifeSpan Biosciences databases. Figure 3 depicts GPCRs for which it has been reported that antibodies are commercially available, SEQ ID NOS. 1, 3, 5, 11, 13, 15, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41, 43, 45, 49, 51, 53, 57, 59, 61, 63, 65, 67, 69, 70, 71, 73, 75, 77, 79, 83, 85, 97, 99, 101, 103, 105, 107, 113, 115, 117, 121, 125, 135, 139, 143, 145, 147, 151, 155, 157, 159, 161, 169, 171, 173, 175, 177,  
 30 183, 185, 187, 189, 191, 192, 194, 200, 202, 206, 208, 214, 216, 218, 228, 236, 238, 240, 248, 250, 264, 295, 299, 301, 305, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 347, 349, 351, 361, 365, 367, 369, 371, 377, 379, 385, 387, 389, 391, 397,

423, 435, 439, 457, 459, 461, 462, 468, 470, 472, 503, 507, 515, 535, 537, 546, 548, 552, 562, 628, 636; Applicants do not represent that any of the antibodies in Figure 3 that such antibodies are actually commercially available nor that they have any significant specificity nor affinity for the GPCRs reported. For GPCRs for which no antigens or antibodies were previously known, the present invention provides valuable antigenic peptides and antibodies (see, e.g., SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.); for GPCRs for which antigens or antibodies are known, the present invention provides improved antigens in the form of antigenic peptides and improved antibodies (see, e.g., SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, which are antigenic peptides derived from GPCRs for which antibodies are reportedly commercially available). The antigenic peptides and antibodies, and uses and assays, etc., related to the antigenic peptides, are discussed further below.

[32] The discussion herein, including the following passages, has been separated by headings for convenience. The disclosure under a given heading is not restricted to that heading. For example, the discussion in the definitions section is a part of the disclosure of the invention, the discussion on antigenic peptides also contains discussion related to probes and diagnostics, and the discussion on antibodies contains discussion related to therapeutic compositions, etc.

## B. DEFINITIONS

[33] The following paragraphs provide a non-exhaustive list of definitions of some of the terms and phrases as used herein. All terms used herein, including those specifically described below in this section, are used in accordance with their ordinary meanings unless the context or definition indicates otherwise. Also unless indicated otherwise, except within

the claims, the use of "or" includes "and" and vice-versa. Non-limiting terms are not to be construed as limiting unless expressly stated (for example, "including" means "including without limitation" unless expressly stated otherwise).

[34] The terms set forth in this application are not to be interpreted in the claims as indicating a "means plus function" relationship unless the word "means" is specifically recited in a claim, and are to be interpreted in the claims as indicating a "means plus function" relationship where the word "means" is specifically recited in a claim. Similarly, the terms set forth in this application are not to be interpreted in method or process claims as indicating a "step plus function" relationship unless the word "step" is specifically recited in the claims, and are to be interpreted in the claims as indicating a "step plus function" relationship where the word "step" is specifically recited in a claim.

[35] "Agonist" indicates a substance, such as a molecule or compound, that interacts with a particular GPCR, for example by binding to the GPCR, to activate, increase, or prolong the amount or the duration of the effect of the biological activity or functionality of the GPCR. Agonists include proteins, nucleic acids, carbohydrates, or any other molecules that bind to and positively modulate the effect of the GPCR. Agonists and other modulators of the particular GPCR can be identified using *in vitro* or *in vivo* assays for G protein-coupled receptor expression or G protein-mediated signaling. For example, assays for agonists and other modulators include expressing a particular GPCR in cells or cell membranes, applying putative modulator compounds in the presence or absence of a specific known or putative ligand and then determining the functional effects on the particular GPCR-mediated signaling. Samples or assays comprising a particular GPCR that are treated with a potential agonist or other modulator are compared to control samples without the agonist or other modulator to examine the extent of modulation. Control samples can be assigned a relative activity value for the particular GPCR of 100%. Agonist activity on a particular GPCR is achieved when the G protein-coupled receptor activity value relative to the control is at least about 110%, optionally about 150%, preferably about 200-500%, or about 1000-3000% or higher. Down-modulation (for example by an antagonist) of a particular GPCR is achieved when the particular GPCR activity value relative to the control is at most about 90%, typically about 80%, optionally about 50% or about 25-0% of the 100% value.

[36] "Aggregate," see Complex.

[37] "Algorithm" refers to a detailed sequence of actions to perform to accomplish some task. In computer programming, refers to instructions given to the computer.

[38] "Allele" or "allelic sequence" indicates an alternative form of the gene encoding the GPCR. Alleles may result from at least one mutation in the nucleic acid sequence and may  
5 result in altered mRNAs or in polypeptides whose structure or function may or may not be altered. Any given natural or recombinant gene may have none, one, or many allelic forms. Common mutational changes that give rise to alleles are generally ascribed to natural deletions, additions, or substitutions of nucleotides. Each of these types of changes may occur alone or in combination with the others, one or more times in a given sequence.

10 [39] "Altered" nucleic acid sequences encoding the GPCR include those sequences with deletions, insertions, or substitutions of different nucleotides, resulting in a polynucleotide encoding the same GPCR or a polypeptide variant with at least one substantial structural or functional characteristic of the GPCR. Included within this definition are polymorphisms that may or may not be readily detectable using a particular oligonucleotide probe against the  
15 polynucleotide encoding the GPCR. "Altered" proteins may contain deletions, insertions, or substitutions of amino acid residues that produce a silent change and result in a functionally equivalent GPCR. Deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, or the amphipathic nature of the residues, as long as the biological or immunological activity of the GPCR is  
20 retained. For example, negatively charged amino acids may include aspartic acid and glutamic acid, positively charged amino acids may include lysine and arginine, and amino acids with uncharged polar head groups having similar hydrophilicity values may include leucine, isoleucine, and valine; glycine and alanine; asparagine and glutamine; serine and threonine; and phenylalanine and tyrosine.

25 [40] "Alternative splicing" refers to different ways of cutting and assembling exons to produce mature mRNAs.

[41] "Amino acid" refers generally to any of a class of organic compounds that contains at least one amino group,  $-NH_2$ , and one carboxyl group,  $-COOH$ . The alpha-amino acids,  $RCH(NH_2)COOH$ , are the building blocks from which proteins are typically constructed.  
30 Amino acid can also refer to artificial chemical analogues or mimetics of a given amino acid as described, depending on the context.

[42] "Amino acid sequence" refers to a string of amino acids, such as an oligopeptide, peptide, polypeptide, or protein sequence, or a fragment of any of these, including naturally occurring or synthetic molecules and those comprising an artificial chemical analogue or mimetic of a given amino acid. In this context, "biologically active fragments," "biologically functional fragments," "immunogenic fragments," and "antigenic fragments" refer to fragments of the GPCR that are preferably about 15, 25, or 50 or more amino acids in length and that retain a substantial amount of such activity of the GPCR. Where "amino acid sequence" refers to an amino acid sequence of a naturally occurring protein molecule, "amino acid sequence" and like terms are not necessarily limited to the complete native amino acid sequence associated with the recited protein molecule.

[43] "Amplification" indicates the production of additional copies of something, such as a nucleic acid sequence. Amplification can be generally carried out using polymerase chain reaction (PCR) technologies or other technologies such as the cycling probe reaction (CPR) that are well known in the art. *See, e.g.*, Dieffenbach, C. W. and G. S. Dveksler, PCR Primer, a Laboratory Manual, pp.1-5, Cold Spring Harbor Press, Plainview, N.Y. (1995); U.S. Patents Nos. 5,660,988, 5,731,146 and 6,136,533.

[44] "Amplification primers" are oligonucleotides such as natural, analog or artificially created nucleotides that can serve as the basis for the amplification of a selected nucleic acid sequence. They include, for example, both PCR primers and ligase chain reaction oligonucleotides.

[45] "Analog" or "variant" indicates a GPCR or antigenic peptide that has been modified by deletion, addition, modification, or substitution of one or more amino acid residues compared to the wild-type sequence. Analogs encompass allelic and polymorphic variants, and also muteins and fusion proteins that comprise all or a significant part of such GPCR, *e.g.*, covalently linked via side-chain group or terminal residue to a different protein, polypeptide, or moiety (fusion partner). Variants of a particular GPCR protein refer to an amino acid sequence that is altered by one or more amino acids, for example by one or more amino acid substitution, insertion, deletion or modification, or proteins with or without associated native-pattern glycosylation. The variant may have "conservative" changes. Such "conservative" changes generally are well known in the art and readily determinable for a particular GPCR in view of the present application. Conservative changes include, for example, substitutions where a substituted amino acid has similar structural or chemical

properties to the amino acid it replaced (*e.g.*, negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine, arginine, histidine, asparagine, and glutamine; amino acids containing sulfur include methionine and cysteine; polar hydroxy amino acids include serine, threonine, and tyrosine; large hydrophobic amino acids include phenylalanine and tryptophan; small hydrophobic amino acids include alanine, leucine, isoleucine, and valine). A variant may also have "nonconservative" changes which means that the replacement amino acid provides some substantial change in the amino sequence.

[46] A variant preferably retains at least about 90% identity, and more preferably at least about 95% identity. Within certain embodiments, such variants contain alterations such that the ability of the variant to induce an immunogenic response is not substantially eliminated; in some embodiments the ability to an immunogenic response is not substantially diminished. Modifications of amino acid residues may include but are not limited to aliphatic esters or amides of the carboxyl terminus or of residues containing carboxyl side chains, O-acyl derivatives of hydroxyl group-containing residues, and N-acyl derivatives of the amino-terminal amino acid or amino-group containing residues, *e.g.*, lysine or arginine. Guidance in determining which and how many amino acid residues may be substituted, inserted, deleted or modified without diminishing immunological or biological activity may be found in view of the present application using any of a variety of methods and computer programs known in the art, for example, DNASTAR software. Properties of a variant may generally be evaluated by assaying the reactivity of the variant with, for example, antibodies as described herein or evaluating a biological activity characteristic of the native protein as described herein or as known in the art in view of the present application. Certain polynucleotide variants are capable of hybridizing under appropriately stringent conditions to a naturally occurring DNA sequence encoding a particular GPCR protein (or a complementary sequence). Such hybridizing nucleic acid sequences are also within the scope of this invention.

[47] "Antagonist" refers to a molecule which interacts with a particular GPCR, for example by binding to the particular GPCR, and prevents, inactivates, decreases or shortens the amount or the duration of the effect of the biological activity of the GPCR. Antagonists include proteins, nucleic acids, carbohydrates, antibodies, or any other molecules that so affect the GPCR. Antagonists can be identified, for example, using appropriate screens

corresponding to those described for agonists above and elsewhere herein or as would be apparent to those skilled in the art in view of the present application.

[48] "Antibody" indicates one type of binding partner, typically encoded by an immunoglobulin gene or immunoglobulin genes, and refers to, for example, intact  
5 monoclonal antibodies (including agonist and antagonist antibodies), polyclonal antibodies, phage display antibodies, and multispecific antibodies (*e.g.*, bispecific antibodies) formed, for example, from at least two intact antibodies. Antibody also refers to fragments thereof, which comprise a portion of an intact antibody, generally the antigen-binding or variable region of the intact antibody that are capable of binding the epitopic determinant. Examples  
10 of antibody fragments include Fab, Fab', F(ab')<sub>2</sub>, and Fv fragments, diabodies, linear antibodies, single-chain antibody molecules, and multispecific antibodies formed from antibody fragments. *See* US Patent No. 6,214,984. Antibody fragments may be synthesized by digestion of an intact antibody or synthesized *de novo* either chemically or utilizing recombinant DNA technology. Antibodies according to the present invention have at least  
15 one of adequate specificity, affinity and capacity to perform the activities desired for the antibodies. Antibodies can, for example, be monoclonal, polyclonal, or combinatorial. Antibodies that bind GPCR polypeptides can be prepared using intact polypeptides or using fragments containing small peptides of interest as the immunizing antigen. The polypeptide or oligopeptide used to immunize an animal (*e.g.*, a mouse, a rat, or a rabbit) can be derived  
20 from the translation of RNA, or synthesized chemically, and can be conjugated to a carrier protein if desired. Commonly used carriers that are chemically coupled to peptides include bovine serum albumin, thyroglobulin, and keyhole limpet hemocyanin (KLH). The coupled peptide is then used to immunize the animal.

[49] "Antigenic determinant" refers to the antigen recognition site on an antigen (*i.e.*,  
25 epitope). Such antigenic determinant may also be immunogenic.

[50] "Antisense" refers to any composition containing a nucleic acid sequence that is complementary to a specific nucleic acid sequence. "Antisense strand" refers to a nucleic acid strand that is complementary to the "sense" strand. Antisense molecules may be produced by any method including transcription or synthesis including synthesis by ligating  
30 the gene(s) of interest in a reverse orientation to a desired promoter that permits the synthesis of a complementary strand. Once introduced into a cell, the complementary nucleotides can combine with natural sequences produced by the cell to form duplexes and to block either



transcription or translation. The designation "negative" can refer to the antisense strand, and the designation "positive" can refer to the sense strand.

[51] "Biologically active" or "biologically functional," when referring to an antigenic peptide, indicates that the antigenic peptide induces an immunogenic response specific for the antigenic peptide and thus for the GPCR from which it was obtained. A variant, fragment, etc., of an antigenic peptide is "biologically active" or "biologically functional" if the ability to induce the specific immunogenic response is not substantially diminished. The term "not substantially diminished" means retaining a functionality that is at least about 90% of the functionality of the native antigenic peptide. Appropriate assays designed to evaluate such functionality may be designed based on existing assays known in the art in view of the present application, or on the representative assays provided herein.

[52] "Annotation" refers to the provision of helpful or identifying information about a GPCR or other open reading frame (ORF), such as locus name, key words, and Medline references.

[53] "BLAST" refers to the Basic Local Alignment Search Tool, which is a technique for detecting ungapped sub-sequences that match a given query sequence. BLAST can be used as a preliminary step for detecting ORF boundaries.

[54] "BLASTP" refers to a BLAST program that compares an amino acid query sequence against a protein sequence database.

[55] "BLASTX" refers to a BLAST program that compares the six-frame conceptual translation products of a nucleotide query sequence (both strands) against a protein sequence database. BLASTX can be used to create a sub-database of ORFs which may exist on a contig, and to identify the best match between one of these ORFs and a sequence in an external database.

[56] "Buffer" refers to a component in a solution to provide a buffered solution that resists changes in pH by the action of its acid-base conjugate components.

[57] "CDS" refers to the GenBank DNA sequence entry for coding sequence. A coding sequence is a sub-sequence of a DNA sequence that is surmised to encode a gene. A complete gene coding sequence begins with an "ATG" and ends with a stop codon.

[58] "Clone" in molecular biology refers to a vector carrying an insert DNA sequence.

[59] "Cloning" in molecular biology refers to a recombinant DNA technique used to produce multiple, up to millions or more, copies of a DNA sequence. The DNA sequence is

inserted into a small carrier or vector (*e.g.*, plasmid, bacteriophage, or virus) and inserted into a host cell for amplification or expression.

[60] "Cluster" refers to a group of ORFs related to one another by sequence homology. Clusters are generally determined by a specified degree of homology and overlap (*e.g.*, a stringency).

[61] "Comparison window" indicates a segment of any one of the number of contiguous positions selected from the group consisting of from 20 to 600, usually about 50 to about 200, more usually about 100 to about 150 in which a sequence may be compared to a reference sequence of the same number of contiguous positions after the two sequences are aligned to enhance sequence similarity. Methods of alignment of sequences for comparison will be readily apparent to a person of ordinary skill in the art in view of the present application.

[62] "Complementary" or "complementarity" refers to the natural binding of polynucleotides by base pairing. For example, the sequence "A-G-T" binds to the complementary sequence "T-C-A." Complementarity between two single-stranded molecules may be "partial," such that only some of the nucleic acids bind, or it may be "complete," such that all of the nucleotides of at least one of the single-stranded molecules binds to corresponding nucleotides of the other single-stranded molecule. The degree of complementarity between nucleic acid strands has significant effects on the efficiency and strength of the hybridization between the nucleic acid strands. This can be of particular importance in amplification reactions, which can depend upon binding between nucleic acids strands, and in the design and use of peptide nucleic acid (PNA) molecules.

[63] "Complex," or "aggregate," indicates a dimer or multimer formed between at least two proteins or other macromolecules, for example a GPCR and its ligand.

[64] "Composition" indicates a combination of multiple substances into a mixture.

[65] "Composition comprising a given amino acid sequence" refers broadly to any composition containing the given amino acid sequence. The composition may comprise a dry formulation, an aqueous solution, or a sterile composition.

[66] "Consensus sequence" refers to the sequence that reflects the most common choice of base or amino acid at each position from a series of related DNA, RNA, or protein sequences. Areas of particularly good agreement often represent conserved functional domains. The generation of consensus sequences has typically been subjected to intensive mathematical analysis.

[67] "Conservative changes" to an amino acid sequence, see Analog.

[68] "Deletion" refers to a change in the amino acid or nucleotide sequence that results in the absence of one or more amino acid residues or nucleotides.

[69] "Derivative" refers to chemical modification of an antigenic peptide, or of an antibody specific for and created from the antigenic peptide. A derivative peptide can be modified, for example, by glycosylation or pegylation.

[70] "Diabodies" refers to one type of antibody comprising small antibody fragments with two antigen-binding sites, which fragments comprise a heavy-chain variable domain ( $V_H$ ) connected to a light-chain variable domain ( $V_L$ ) on the same polypeptide chain ( $V_H$ - $V_L$ ).  
10 By using a linker that is too short to allow pairing between the two domains on the same chain, the domains pair with the complementary domains of another chain and create two antigen-binding sites. Diabodies are described, for example, in EP 404,097; WO 93/11161; and Holliger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993).

[71] "Database" refers to a structured format for organizing and maintaining information or data, a collection of data records, in a computer-readable form that can be rapidly and easily retrieved. A database is typically stored in a computer-readable memory. Records may comprise web pages, graphics, audio files, text files, or links. Records may or may not be further broken into fields. Database records are usually indexed and come with a search interface to find records of interest.

20 [72] "E-value" refers to a result of a FASTA analysis. The number indicates the probability that a match between two sequences is due to random chance.

[73] "Expression vector" is a specialized vector constructed so that the gene inserted in the vector can be expressed in the cytoplasm of a host cell.

[74] "FASTA" refers to a modular set of sequence comparison programs used to  
25 compare an amino acid or DNA sequence against all entries in a sequence database. FASTA was written by Professor William Pearson of the University of Virginia Department of Biochemistry. The program uses the rapid sequence algorithm described by Lipman and Pearson (1988) and the Smith-Waterman sequence alignment protocol. FASTA performs a protein to protein comparison.

30 [75] "FASTX" refers to a module of the FASTA protocol used to define optimal ORF boundaries while searching for genes. FASTX uses a nucleotide to protein sequence comparison.

[76] "Fragment," see Portion.

[77] "GenBank" refers to a family of public databases comprising nucleic acid and amino acid sequence information, including the GenPept bacterial peptide database.

[78] "Gene" refers to the basic unit of heredity that carries the genetic information for a given RNA or protein molecule. A gene is composed of a contiguous stretch of DNA and contains a coding region that is flanked on each end by regions that are transcribed but not translated. A gene is a segment of DNA involved in producing a biologically active or biologically functional polypeptide chain.

[79] "Heterologous" indicates a nucleic acid that comprises two or more subsequences that are not found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences from unrelated genes arranged to make a new functional nucleic acid, *e.g.*, a promoter from one source and a coding region from another source. Similarly, a heterologous protein indicates that the protein comprises two or more subsequences that are not found in the same relationship to each other in nature (*e.g.*, a fusion protein).

[80] "Hit Threshold" refers to a pre-set E-value or P-value for evaluating sequence matches. For example, this value can be set at  $1e-6$  for finding genes; and at  $1e-15$  for clustering genes.

[81] "Homology" refers to a degree of complementarity. There may be partial homology or complete homology. The word "identity" may substitute for the word "homology." A partially complementary sequence that at least partially, and substantially, inhibits a corresponding sequence from hybridizing to a target nucleic acid is referred to as "substantially homologous." The inhibition of hybridization of the completely complementary sequence to the target sequence may be examined using a hybridization assay (*e.g.*, Southern or Northern blot, *in situ* hybridization, solution hybridization) under conditions of reduced stringency. A substantially homologous sequence or hybridization probe will compete for and inhibit the binding of a completely homologous sequence to the target sequence under stringency conditions that inhibit non-specific binding but permit specific binding. The absence of non-specific binding may be tested by the use of a second target sequence which lacks even a partial degree of complementarity (*e.g.*, less than about 30% homology or identity). In the absence of non-specific binding, the substantially

homologous sequence or probe will not hybridize to the second, non-complementary target sequence.

[82] **"Humanized antibody"** refers to antibody molecules in which the amino acid sequence in the non-antigen-binding regions has been altered so that the antibody more closely resembles a human antibody, and still retains its original binding ability. Typically, humanized antibodies are human immunoglobulins (recipient antibody) in which residues from a complementarity-determining region (CDR) of the recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of the human immunoglobulin are replaced by corresponding non-human residues. Furthermore, humanized antibodies may comprise residues that are found neither in the recipient antibody nor in the imported CDR or framework sequences. These modifications are typically made to further refine and optimize antibody performance. In general, the humanized antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin sequence. The humanized antibody optimally also will comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human immunoglobulin. For further details see, *e.g.*, Jones et al., *Nature*, 321:522-525 (1986); Reichmann et al., *Nature*, 332:323-329 (1988); and, Presta, *Curr. Op. Struct. Biol.*, 2:593-596 (1992).

[83] **"Identity,"** see Homology.

[84] **"Immunocytochemistry"** refers to the use of immunologic methods, including a specific antibody, to study cell constituents.

25 [85] **"Immunohistochemistry"** refers to the use of immunologic methods, including a specific antibody, to study specific antigens in tissue slices.

[86] **"Immunolocalization"** refers to the use of immunologic methods, including a specific antibody, to locate molecules or structures within cells or tissues.

[87] **"Immunologically active"** refers to the capability of a natural, recombinant, or synthetic GPCR, or any immunogenic fragment thereof, to induce a specific immune response in appropriate animals or cells and to bind with specific antibodies. A polypeptide is "immunologically active" if it is recognized by (*e.g.*, specifically bound by) a B-cell or T-

cell surface antigen receptor. Immunological activity may generally be assessed using well known techniques, such as those summarized in Paul, Fundamental Immunology, 3rd ed., 243-247, Raven Press (1993) and references cited therein. Such techniques include screening polypeptides derived from the native polypeptide for the ability to react with antigen-specific antisera or T-cell lines or clones, which may be prepared in view of the present application using well known techniques. Preferably, an immunologically active portion of a GPCR protein reacts with such antisera or T-cells at a level that is not substantially lower than the reactivity of the full-length polypeptide (*e.g.*, in an ELISA or T-cell reactivity assay). Such screens may generally be performed using methods well known to those of ordinary skill in the art in view of the present application, such as those described in Harlow and Lane, Antibodies: A Laboratory Manual, Cold Spring Harbor Press (1988). B-cell and T-cell epitopes may also be predicted via computer analysis.

[88] "Immune response" refers to any of the body's immunologic reactions to an antigen such as antibody formation, cellular immunity, hypersensitivity, or immunological tolerance.

[89] "Insertion" and "addition" when referring to a change in a nucleotide or amino sequence indicate the addition of one or more nucleotides or amino acid residues, respectively, to the sequence.

[90] "*In situ* hybridization" refers to use of a nucleic acid probe, typically a DNA or RNA probe, to detect the presence of a DNA or RNA sequence in target cells such as cloned bacterial cells, cultured eukaryotic cells, or tissue samples. *In situ* hybridization can also be used for locating genes on chromosomes. The process can be performed by preparing a microscope slide with cells in metaphase of mitosis, then treating slide with a weak base to denature the DNA. Next, pour radioactively labeled probe onto the slide under hybridizing conditions, expose the slide to a photographic emulsion for a suitable period such as a few days or weeks, then develop the emulsion.

[91] "Isoform" refers to different forms of a protein that may be produced from different genes or from the same gene by alternative RNA splicing.

[92] "Isolated" generally means that the material is removed from its original environment (*e.g.*, the natural environment if it is naturally occurring).

[93] "Library" refers physically to a pool of nucleic acid fragments that has been propagated in a cloning vector. Library can also refer to an electronic collection of genomic

or proteomic sequence data, including raw sequences, contigs, ORFs and loci from a specific organism.

- [94] "Ligand" refers to an ion or molecule that binds with another molecule, such as a GPCR, to form a macromolecule such as a receptor-ligand complex. An "endogenous  
5 ligand" refers to a native ligand that binds to the receptor of the GPCR and modulates biological activity or functionality of the GPCR in its native environment. A "specific ligand" is a ligand able to bind to a particular GPCR and modulate the biological activity or functionality of the particular GPCR; an endogenous ligand is one example of a specific ligand.
- 10 [95] "Microarray" refers to an array of distinct nucleic acid or amino acid molecules arrayed on a substrate, such as paper, nylon or any other type of membrane, filter, chip, glass slide, or any other suitable solid support. Microarrays can also refer to tissue microarrays, composed of small tissue pieces arranged on a slide. U.S. Pat. No. 5,143,854 and PCT Patent Publication Nos. WO 90/15070 and 92/10092.
- 15 [96] "Mimetic" refers to a molecule, *e.g.*, a peptide or non-peptide agent, such as a small molecule, that is able to perform the same biological activity as a certain biologically active agent. For example, some mimetics are molecules comprising the same biological function or activity as the particular GPCR. The structure of the mimetic can be developed from knowledge of the structure of the particular GPCR or portions thereof. For appropriate  
20 mimetics, the mimetic is able to effect some or all of the actions of a given antigenic peptide or antibodies against the antigenic peptide. Such mimetics can be made, in view of the present application, using techniques well known in the art, *see, e.g.*, U.S. Patent Nos. 6,197,752; 6,093,697; 6,207,643; 5,849,323, and can be included in the various processes, methods, and systems, etc., described herein, such as databases, binding partner assays,  
25 probes, medicaments, and therapeutics.
- [97] "Modulate" refers to controllably changing the activity of a substance or other item, such as the biological activity of a GPCR, antigenic peptide or corresponding antibody. For example, modulation may cause an increase or a decrease in protein activity, binding characteristics, or other biological, functional, or immunological properties of the GPCR.
- 30 [98] "Monoclonal antibody" refers to an antibody obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present

in minor amounts. Monoclonal antibodies include "chimeric" antibodies (immunoglobulins) in which a portion of the heavy or light chain is identical with or homologous to corresponding sequences in antibodies derived from a particular species or belonging to a particular antibody class or subclass, while the remainder of the chain(s) is identical with or homologous to corresponding sequences in antibodies derived from another species or belonging to another antibody class or subclass, as well as fragments of such antibodies, so long as they exhibit the desired biological activity. U.S. Pat. No. 4,816,567; Morrison et al., P.N.A.S. USA, 81:6851-6855 (1984). Monoclonal antibodies are highly specific, being directed against a single antigenic site. As a matter of distinction, polyclonal antibody preparations typically include different antibodies directed against different determinants (epitopes) of a target antigen whereas each monoclonal antibody is directed against a single determinant on the antigen. Monoclonal antibodies can be synthesized by hybridoma culture, uncontaminated by other immunoglobulins. For example, the monoclonal antibodies to be used in accordance with the present invention may be made by the hybridoma method first described by Kohler and Milstein, Nature, 256:495 (1975), or may be made by recombinant DNA methods. See, e.g., U.S. Pat. No. 4,816,567. Monoclonal antibodies may also be isolated from phage antibody libraries using the techniques described in Clackson et al., Nature, 352:624-628 (1991), and Marks et al., J. Mol. Biol., 222:581-597 (1991), for example. The modifier "monoclonal" indicates the character of the antibody as being obtained from a substantially homogeneous population of antibodies, and is not to be construed as requiring production of the antibody by any particular method.

[99] "Nonconservative" changes to an amino acid sequence, see Analog.

[100] "Northern blotting" or "Northern analysis" refers to a method used to detect specific RNA sequences. For example, the process can be performed by electrophoresing RNA in a denaturing agarose gel, transferring the gel onto a membrane, and hybridizing with a labeled RNA or DNA probe.

[101] "Nucleic acid sequence" refers to a polymer comprising a string of "nucleic acids" such as an oligonucleotide, or a polynucleotide or fragment thereof. The nucleic acid sequence can be from DNA or RNA of genomic or synthetic origin, may be single-stranded or double-stranded, and may represent the sense or the antisense strand. A nucleic acid sequence can also be a PNA or a DNA-like or RNA-like material. Unless stated otherwise,



the term encompasses nucleic acids containing known analogues or mimetics of natural nucleotides that have similar binding properties as the reference nucleic acid.

[102] **"Oligonucleotide"** refers to a nucleic acid sequence, generally between 6 nucleotides to 60 nucleotides, preferably about 15 to 30 nucleotides, and most preferably  
5 about 20 to 25 nucleotides, that can, for example, be used in PCR or other nucleic acid amplification or in a hybridization assay or microarray. "Oligonucleotide" includes "amplimers," "primers," "oligomers," and "probes," as these terms are commonly defined in the art. Oligonucleotides can be chemically synthesized. Such synthetic oligonucleotides may have no 5' phosphate and if so will not ligate to another oligonucleotide without adding a  
10 phosphate, typically by using an ATP in the presence of a kinase. A synthetic oligonucleotide will ligate to a fragment that has not been dephosphorylated.

[103] **"Operably linked"** or **"operably connected"** indicates that one element of an apparatus, system, or method, etc., is connected to another element of the apparatus, system, or method, etc., such that the two elements are able to perform their intended purposes. For  
15 example, when a promoter is linked to a polynucleotide to allow transcription of the polynucleotide, it is "operably linked" to the polynucleotide.

[104] **"Orphan receptor"** refers to a receptor for which the endogenous ligand or other ligands inducing biological activity are not known.

[105] **"PCR"** or **"polymerase chain reaction"** refers to an *in vitro* method that uses  
20 oligonucleotide primers, enzymes, and a series of repetitive temperature cycles to generate millions of copies of a nucleic acid, typically DNA, from an original specimen of a specific DNA sequence, which specimen may be present only in a trace amount.

[106] **"Plasmids"** refers to extrachromosomal genetic elements composed of DNA or RNA found in both eukaryotic and prokaryotic cells that can propagate themselves  
25 autonomously in cells. Plasmids can be used as carriers or vectors to clone DNA molecules. They are designated by a lower case p preceded or followed by capital letters or numbers. The starting plasmids herein are either commercially available, publicly available on an unrestricted basis, or can be constructed from available plasmids in accord with published procedures. In addition, equivalent plasmids to those described are known in the art and will  
30 be apparent to the ordinarily skilled artisan in view of the present application.

[107] **"Polynucleotide encoding a polypeptide"** indicates a polynucleotide that includes only the coding sequence for the polypeptide as well as polynucleotides that include additional coding or non-coding sequence.

[108] **"Portion"** or **"fragment"** with regard to a protein (as in "a portion of a given protein") refers to parts of that protein, a subsequence of the complete amino acid sequence of the receptor containing at least about 8, usually at least about 12, more typically at least about 20, and commonly at least about 30 or more contiguous amino acid residues, up to the entire amino acid sequence minus one amino acid. Thus, a protein "comprising at least a portion of the amino acid sequence of SEQ ID NO:XX" or a protein "comprising at least a portion of the amino acid sequence of a particular GPCR" encompasses the full-length protein and fragments thereof. A portion or fragment of a nucleic acid refers to nucleic acid sequences that are greater than about 12 nucleotides in length, and typically at least about 60 or 100 nucleotides, generally at least about 1000 nucleotides, or at least about 10,000 nucleotides in length, up to the entire nucleic acid sequence minus one nucleic acid.

[109] **"P-value"** is a statistical term used to indicate the probability that an event is due to random chance. When used in reference to a result of BLAST searches, the number indicates the probability that a match between two sequences is due to random chance.

[110] **"Receptor"** refers to a molecular structure, typically within a cell or on a cell surface, that selectively binds a specific substance (a ligand) and a specific physiologic effect that accompanies the binding. GPCRs are a type of cell-surface receptor, which means a protein in, on, or traversing the cell membrane (in the case of GPCRs, traversing the cell membrane) that recognizes and binds to specific molecules in the surrounding fluid. The binding to a receptor may serve to transport molecules into the cell's interior or to signal the cell to respond in some way.

[111] **"Recombinant"** refers to both a method of production and a structure. Some recombinant nucleic acids and proteins are made by the use of recombinant DNA techniques that involve human intervention, either in manipulation or selection. Others are made by fusing two fragments that are not naturally contiguous to each other. Engineered vectors are encompassed, as well as nucleic acids comprising sequences derived using any synthetic oligonucleotide process.

[112] **"Sample"** is used in its usual broad sense. For example, a biological sample suspected of containing nucleic acids encoding the GPCR, or fragments thereof, or the GPCR

itself, may comprise a bodily fluid; an extract from a cell, chromosome, organelle, or membrane from a cell; a cell; genomic DNA, RNA, or cDNA (in solution or bound to a solid support); a tissue; a tissue print, and the like. Biological sample refers to samples from a healthy individual as well as to samples from a subject suspected of having or susceptible to having, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[113] "Second messengers" refer to intracellular signaling molecules such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or  $\text{Ca}^{2+}$ . Second messengers, in turn, alter the

activity of other intracellular proteins such as cAMP-dependent protein kinase and  $\text{Ca}^{2+}$ /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal.

[114] "Southern blotting" refers to a method for detecting specific DNA sequences via hybridization. For example, a DNA sample can be electrophoresed in a denaturing agarose gel, transferred onto a membrane, and hybridized with a complementary nucleic acid probe. "Southern" when used in reference to a database indicates an electronic analog of the laboratory technique, which analysis can be used to identify libraries in which a given DNA sequence, such as a gene, EST, or ORF is present. The terms "Northern" and "Western" likewise can be used for electronic analogs to the respective laboratory techniques described above.

[115] "Specific binding" or "specifically binding" refers to an interaction between protein or peptide and a certain substance, such as its specific ligand or antibody, and in some cases its agonists or antagonists. The interaction is dependent upon the presence of a particular structure of the protein recognized by the binding molecule (*e.g.*, the antigenic determinant or epitope). For example, if an antibody specifically binds epitope "A," the presence of a polypeptide containing epitope A or the presence of free unlabeled epitope A will reduce the amount of labeled epitope A that binds to the antibody in a reaction containing free labeled epitope A and the antibody. Conversely, the presence of a polypeptide that does not contain epitope A will not reduce the amount of labeled epitope A that binds to the antibody. Highly specific binding indicates that the protein or peptide binds to its particular ligand, antibody, etc., and does not bind in a significant amount to other proteins present in the sample. Typically, a specific or selective reaction will be at least twice the background signal or noise and more typically more than 10 to 100 times the background signal or noise.

[116] "Stringent conditions" refer to conditions that permit hybridization between complementary polynucleotide sequences. Suitably stringent conditions can be defined by, for example, the concentrations of salt or formamide in the prehybridization and hybridization solutions, or by the hybridization temperature. Stringency can be increased by reducing the concentration of salt, increasing the concentration of formamide, or raising the hybridization temperature. Stringent conditions are dependent upon the type of probe as well as the length of the probe and the GC content of the probe. "Stringent conditions" typically

occur within a range from about  $T_m - 5^\circ\text{C}$  ( $5^\circ\text{C}$  below the melting temperature ( $T_m$ ) of the probe) to about  $T_m - 20 - 25^\circ\text{C}$  for a cRNA probe and to about  $T_m - 15^\circ\text{C}$  for an oligonucleotide probe. **"Highly stringent conditions"** refers to conditions under which a probe will hybridize to its target sequence, typically in a complex mixture of nucleic acid sequences, but will not substantially hybridize to other sequences. One example of high stringency conditions for a cRNA probe that is 1,000 nucleotides in length and has a GC content of about 60% is about  $55 - 65^\circ\text{C}$  in 50% formamide, 0.1 X SSC, and 200  $\mu\text{g/ml}$  sheared and denatured salmon sperm DNA. One example of low stringency conditions for the same probe in 50% formamide, 0.1 X SSC, and 200  $\mu\text{g/ml}$  sheared and denatured salmon sperm DNA would be  $30 - 35^\circ\text{C}$ . **"Very highly stringent conditions"** indicates that there must be complete identity between the sequences. The temperature range corresponding to a particular level of stringency can be narrowed further by calculating the purine to pyrimidine ratio of the nucleic acid of interest and adjusting the temperature accordingly. Variations on and modifications of the above ranges and conditions will be readily appreciated by those of skill in the art in view of the present application. As will be understood by those of skill in the art in view of the present application, the stringency of hybridization can be altered to identify or detect identical or related polynucleotide sequences. One guide for nucleic acid hybridization is Tijssen, Laboratory Techniques in Biochemistry and Molecular Biology-v.24 Hybridization with Nucleic Acid Probes, Part I "Overview of principles of hybridization and the strategy of nucleic acid assays" (New York: Elsevier 1993).

[117] **"Substantially purified"** refers to nucleic acid or amino acid sequences that are removed from their natural environment and are separated from other components from such natural environment, and are at least about 60% free, preferably about 75% or 85% free, and most preferably about 90%, 95% or 99% free from such other components with which they are naturally associated. Substantially purified preferably indicates a substantially homogeneous state and can be in either a dry or aqueous solution or other composition as desired. Purity and homogeneity can be assayed by standard methods, for example on a mass or molar basis, using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid chromatography.

[118] "Substitution" when referring to a change in a nucleotide or amino sequence indicates the replacement of one or more nucleotides or amino acids by different nucleotides or amino acids, respectively.

[119] "Variant," see Analog.

- 5 [120] "Western blotting" or "Western analysis" refers to a method for detecting specific protein sequences. For example, the process can be performed by electrophoresing a protein mixture in a denaturing agarose or acrylamide gel, transferring the mixture onto a membrane, and incubating it with an antibody raised against the protein of interest.

[121] Other terms and phrases are defined in other portions of this application.

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#### C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRs AND OTHER POLYPEPTIDES

- [122] The present invention provides improved antigenic peptides, for example as set forth in Figure 2, SEQ ID NOS. 692-2292, and improved methods of identifying such  
15 antigenic peptides from known or publicly available sequences of polypeptides or proteins, i.e., from a candidate polypeptide sequence. Polypeptide and protein are used in their traditional sense to indicate lengthy amino acid molecules, whereas the antigenic peptide has a length significantly less than the length of the corresponding polypeptide or protein such that the antigenic peptide is capable of providing significantly improved antigenicity relative  
20 to the corresponding polypeptide or protein, typically improved specificity, affinity or avidity. The candidate polypeptide can be, for example, a human protein or polypeptide, a naturally occurring protein or polypeptide or a synthetic or recombinant protein or polypeptide.

- [123] The antigenic peptides are typically 5 to about 100 amino acids in length, preferably  
25 6 to about 50 amino acids, and further preferably 7 to about 20 amino acids. The antigenic peptides include short antigenic amino acid sequences (i.e., peptides comprising only a portion of an antigenic sequence as set forth in Figure 2 or as identified using the methods described herein, plus an insignificant number of additional amino acids at one or both ends, where insignificant indicates that the extra amino acids do not substantially interfere with the  
30 antigenicity of the antigenic peptide). Such short antigenic peptides can be identical to at least 5, 6, 7 or more consecutive amino acids of the sequences herein or identified using the methods described herein, or can have one or two (or more, with increasing length)

conservative amino acid substitution for antigenic peptides comprising more than 6 or 7 consecutive amino acids of the sequences herein or identified using the methods described herein. Antigenic peptides and sequences, and related antibodies and assays and the like, are discussed further elsewhere herein with regard to GPCRs, but such discussions applies to all antigenic peptides produced according to the methods herein, including proteins and polypeptides such as kinases, phosphatases and any other desired protein or polypeptide.

5 [124] The identification or selection methods comprise searching the candidate polypeptide sequence using a comparison window of the desired length, then selecting against or rejecting amino acid sequences of the length and having at least 1 characteristic  
10 selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, at least 5, 7, 8, or all of the characteristics are selected.

15 [125] The identification or selection methods can also comprise selecting against amino acid sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide, i.e., some polypeptide other than the candidate polypeptide from which the selected antigen was derived, that is different from the candidate polypeptide, posttranslational modification sites, or highly hydrophobic sequences,  
20 which indicates sequences adequately hydrophobic to be located in a lipid membrane such as a cellular membrane. The posttranslational modification sites can be phosphorylation or glycosylation sites.

[126] The methods can further comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence. Exemplary BLAST-type and FAST-type  
25 analyses are described above, including BLAST, BLASTP, BLASTX, FASTA, and FASTX.

#### D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO PARTICULAR GPCRS

##### [127] ANTIGENIC PEPTIDES GENERALLY:

30 [128] The present invention includes antigenic peptides able to induce specific immunogenic responses, and corresponding binding partners. Such antigenic peptides and

binding partners can be cloned, expressed, isolated, purified, and otherwise obtained or manipulated according to routine methods known in the art in view of the present application.

[129] The present invention further relates to antigenic peptides having an amino acid sequence from a particular GPCR, including analogs, mimetics, fragments, derivatives, and the like of such antigenic peptides. See SEQ ID NOS. 1-2292, Figures 1-3. The antigenic peptides may be recombinant, natural or synthetic. The antigenic peptides include (i) antigenic peptides in which one or more of the amino acid residues are substituted with a conserved or non-conserved amino acid residue (preferably a conserved amino acid residue) and such substituted amino acid residue may or may not be one encoded by the genetic code, (ii) antigenic peptides in which one or more of the amino acid residues includes a substituent group, (iii) antigenic peptides in which the mature polypeptide is complexed (*e.g.*, fused or otherwise bonded) with another compound, such as a compound to increase the half-life of the polypeptide (for example, polyethylene glycol), and (iv) antigenic peptides in which additional amino acids are fused to the antigenic peptide. Preparing and using such analogs, etc., are within the scope of those skilled in the art in view of the present application. The antigenic peptides additionally include antigenic peptides that have at least about 90% identity to the given antigenic peptide, and preferably at least about 95% identity to the antigenic peptide. The antigenic peptides additionally include antigenic peptides that contain at least five, six, seven or more consecutive amino acids that are identical to the given antigenic peptide, as well as antigenic peptides that contain at least six, seven, eight or more consecutive amino acids that are identical to the given antigenic except for one or two conservative changes within this such stretch of amino acids. The antigenic peptides of the present invention can be produced by peptide synthesis.

[130] **EXPRESSION PROFILES BASED ON PROTEINS:**

[131] An expression profile of a particular GPCR in one or more tissues can be made using antibodies or other binding partners produced using the antigenic peptides herein, then using traditional approaches such as Western blotting, immunohistochemistry analysis, protein array, ligand-binding studies, radioimmunoassay (RIA), and high performance liquid chromatography (HPLC), and immunohistochemistry analysis. H&E staining and other analyses can be used in combination with such immunologically-based analyses.

[132] **SCREENING FOR ACTIVITY:**



[133] The activity or functionality of an antigenic peptide can be measured using any of a variety of assays known in the art. Similarly, the specificity or affinity of an antibody or other binding partner made using the antigenic peptide can be measured using any of a variety of assays known in the art

- 5 [134] The activity or functionality of a particular GPCR may be measured using any of a variety of functional assays in which activation of the receptor in question results in an observable change in the level of some second messenger system, including but not limited to adenylyl cyclase, calcium mobilization, arachidonic acid release, ion channel activity, inositol phospholipid hydrolysis, or guanylyl cyclase. Heterologous expression systems utilizing  
10 appropriate host cells to express the nucleic acid of the subject invention are used to obtain the desired second messenger coupling. Receptor activity may also be assayed in an oocyte expression system.

[135] **PROTEIN PURIFICATION:**

- [136] The antigenic peptides and proteins or polypeptides containing them can be purified  
15 by standard methods, including but not limited to salt or alcohol precipitation, preparative disc-gel electrophoresis, isoelectric focusing, high pressure liquid chromatography (HPLC), reversed-phase HPLC, gel filtration, cation and anion exchange, partition chromatography, and countercurrent distribution. Suitable purification methods will be readily apparent to those skilled in the art in view of the present application and are disclosed, *e.g.*, in Guide to  
20 Protein Purification, Methods in Enzymology, Vol. 182, M. Deutscher, Ed., Academic Press, New York, NY (1990). Purification steps can be followed as part of carrying out assays for ligand binding activity. Particularly where a particular GPCR is being isolated from a cellular or tissue source, it is preferable to include one or more inhibitors of proteolytic enzymes in the assay system, such as phenylmethylsulfonyl fluoride (PMSF).

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E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND  
OTHER SYSTEMS AND ASPECTS, OF THE INVENTION

1. SYSTEMS AND METHODS FOR SCREENING FOR A  
PARTICULAR GPCR OR ANTIGENIC PEPTIDE

- 30 [137] **SCREENING FOR ANTIGENIC PEPTIDES:**

[138] As noted elsewhere herein, the present invention provides antigenic peptides and antibodies that are specific for a particular GPCR. The invention also provides systems and

methods for using or detecting such peptides, and antibodies against such peptides or corresponding GPCRs in a sample. The assays are based on the detection of the antigenic peptides, typically as they are displayed by the particular GPCR, or the detection of antibodies produced against the particular antigenic peptides and corresponding GPCRs.

5   **[139]   SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

**[140]**   Many assays are characterized by the ability of antigenic peptides for a particular GPCR to be bound by antibodies against them, and the ability of antibodies produced against such antigenic peptides to bind to antigens or epitopes of the particular GPCR in a sample. Some exemplary assays are described below and elsewhere herein.

10   **[141]   LIST OF ASSAYS:**

**[142]**   A variety of assays can detect antibodies that bind specifically to the desired protein in or from a sample, or detect a desired protein bound to one or more antibodies in or from the sample. Exemplary assays are described in detail in *Antibodies: A Laboratory Manual*, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988). Representative  
15   examples of such assays include: countercurrent immuno-electrophoresis (CIEP), radioimmunoassays, radioimmunoprecipitations, enzyme-linked immunosorbent assays (ELISA), dot blot assays, inhibition or competition assays, sandwich assays, immunostick (dip-stick) assays, simultaneous assays, immunochromatographic assays, immunofiltration assays, latex bead agglutination assays, immunofluorescent assays, biosensor assays, and  
20   low-light detection assays. See U.S. Pat. Nos. 4,376,110 and 4,486,530; WO 94/25597; WO/25598.

**[143]           ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):**

**[144]**   One assay for the detection of a particular GPCR is a sandwich assay such as an enzyme-linked immunosorbent assay (ELISA). In one preferred embodiment, the ELISA  
25   comprises the following steps: (1) coating the particular GPCR antigenic peptide onto a solid phase, (2) incubating a sample suspected of containing anti-particular GPCR antibodies with the antigenic peptide coated onto the solid phase under conditions that allow the formation of an antigen-antibody complex, (3) adding an anti-antibody (such as anti-IgG) conjugated with a label to be captured by the resulting antigen-antibody complex bound to the solid phase,  
30   and (4) measuring the captured label and determining therefrom whether the sample contains anti-particular GPCR antibodies.

**[145]           IMMUNOFLUORESCENCE ASSAY:**

[146] A fluorescent antibody test (FA-test) uses a fluorescently labeled antibody able to bind to one of the proteins of the invention. For detection, visual determinations are made by a technician using fluorescence microscopy, yielding a qualitative result. In one embodiment, this assay is used for the examination of tissue samples or histological sections.

5 [147] **BEAD AGGLUTINATION ASSAYS:**

[148] In latex bead agglutination assays, antibodies to one or more of the antigenic peptides of the present invention are conjugated to latex beads. The antibodies conjugated to the latex beads are then contacted with a sample under conditions permitting the antibodies to bind to desired proteins in the sample, if any. The results are then read visually, yielding a  
10 qualitative result. In some embodiments, as with certain other assays, this format can be used in the field for on-site testing.

[149] **ENZYME IMMUNOASSAYS:**

[150] Enzyme immunoassays (EIA) include a number of different assays that can use the antibodies described in the present application. For example, a heterogeneous indirect EIA  
15 uses a solid phase coupled with an antibody of the invention and an affinity purified, anti-IgG immunoglobulin preparation. The solid phase can be a polystyrene microtiter plate. The antibodies and immunoglobulin preparation are then contacted with the sample under conditions permitting antibody binding, which conditions are well known in the art. The results of such an assay can be read visually or using a device such as a spectrophotometer,  
20 such as an ELISA plate reader, to yield a quantitative result. An alternative solid phase EIA format includes plastic-coated ferrous metal beads able to be moved during the procedures of the assay by means of a magnet. Yet another alternative is a low-light detection immunoassay format. In this highly sensitive format, the light emission produced by appropriately labeled bound antibodies are quantified automatically. Preferably, the reaction  
25 is performed using microtiter plates.

[151] In an alternative embodiment, a radioactive tracer is substituted for the enzyme-mediated detection in an EIA to produce a radioimmunoassay (RIA).

[152] **SANDWICH ASSAY:**

[153] In a capture-antibody sandwich enzyme assay, the desired protein is bound between  
30 an antibody attached to a solid phase, preferably a polystyrene microtiter plate, and a labeled antibody. The results can be measured, for example, using a spectrophotometer, such as an ELISA plate reader.

**[154] SEQUENTIAL AND SIMULTANEOUS ASSAYS:**

**[155]** In a sequential assay format, reagents are allowed to incubate with the capture antibody in a stepwise fashion. The test sample is first incubated with the capture antibody. Following a wash step, incubation with the labeled antibody occurs. In a simultaneous assay, the two incubation periods described in the sequential assay are combined. This eliminates one incubation period plus a wash step.

**[156] IMMUNOSTICK (DIP-STICK) ASSAYS:**

**[157]** A dipstick/immunostick format is essentially an immunoassay using a polystyrene paddle or dipstick instead of a polystyrene microtiter plate as the solid phase. Reagents are the same and the format can either be simultaneous or sequential.

**[158] IMMUNOCHROMATOGRAPHIC ASSAYS:**

**[159]** In a chromatographic strip test format, a capture antibody and a labeled antibody are dried onto a chromatographic strip, which typically comprises nitrocellulose or high porosity nylon bonded to cellulose acetate. The capture antibody is usually spray dried as a line at one end of the strip. At this end, there is an absorbent material that is in contact with the strip. At the other end of the strip, the labeled antibody is deposited in a manner that prevents it from being absorbed onto the membrane. Usually, the label attached to the antibody is a latex bead or colloidal gold. The assay may be initiated by applying the sample immediately in front of the labeled antibody.

**[160] IMMUNOFILTRATION ASSAYS:**

**[161]** Immunofiltration/immunoconcentration formats combine a large solid-phase surface with directional flow of sample/reagents, which concentrates and accelerates the binding of antigen to antibody. In an exemplary format, the test sample is preincubated with a labeled antibody, and then applied to a solid phase such as fiber filters, nitrocellulose membranes, or the like. The solid phase can also be precoated with latex or glass beads coated with capture antibody. Detection of analyte is the same as that in a standard immunoassay. The flow of sample/reagents can be modulated by either vacuum or the wicking action of an underlying absorbent material.

**[162] BIOSENSOR ASSAYS:**

**[163]** A threshold biosensor assay is a sensitive, instrumented assay amenable to screening large numbers of samples at low cost. In one embodiment, such an assay comprises the use of light-addressable potentiometric sensors wherein the reaction involves

the detection of a pH change due to binding of the desired protein by capture antibodies, bridging antibodies, and urease-conjugated antibodies. Upon binding, a pH change is effected that is measurable by translation into electrical potential ( $\mu$ volts). The assay typically occurs in a very small reaction volume, and is very sensitive; the reported detection  
5 limit of the assay is 1,000 molecules of urease per minute.

## 2. ANTIBODIES

### **[164] ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE AND ITS CORRESPONDING GPCR:**

10 **[165]** Highly specific, high affinity or antibodies against a particular GPCR or other polypeptide can be generated using the antigenic peptides herein and using antibody generation techniques as described herein or elsewhere. The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR  
15 in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected. The antibodies produced using the antigenic peptides of the present invention,  
20 for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

**[166]** The antibodies can be used to conduct immunohistochemistry and other analyses of a variety of tissue samples to determine expression of a particular GPCR in such tissues, for  
25 diagnostic assays, and for other desired purposes. The specification will now discuss a variety of antibody types, methods, uses, etc.

### **[167] ANTIBODIES GENERALLY:**

**[168]** In some embodiments, the present invention provides antibodies and other binding partners created using the antigenic peptides herein and directed to a particular GPCR from  
30 which the antigenic peptides were derived. Compositions and uses for such antibodies are contemplated, including diagnostic, medicament, and therapeutic uses. Various diagnostic, medicament, and therapeutic uses for antibodies have been reviewed above and, for example,

in Goldenberg et al., Semin. Cancer Biol., 1(3):217-225 (1990); Beck et al., Semin. Cancer Biol., 1(3):181-188 (1990); Niman, Immunol. Ser., 53:189-204 (1990); Endo, Nippon Igaku Hoshasen Gakkai Zasshi (Japan), 50(8):901-909 (1990); and, U.S. Pat. No. 6,214,984.

[169] Recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as myriad immunoglobulin variable region genes. Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of antigenic peptide chains, each pair having one "light" chain (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen recognition. The terms variable light chain ( $V_L$ ) and variable heavy chain ( $V_H$ ) refer to these light and heavy chains respectively.

15 [170] **ANTI-IDIOTYPIC ANTIBODIES:**

[171] The present invention encompasses anti-idiotypic antibodies, including polyclonal and monoclonal anti-idiotypic antibodies, that are produced using the antibodies described herein as antigens. These anti-idiotypic antibodies are useful because they may mimic the structures of the antigenic peptides set forth herein.

20 [172] Techniques for producing antibodies, including antibody fragments, include the following.

a. Antibody Preparation

(i) Polyclonal Antibodies

25 [173] **ANTIBODY PREP - POLYCLONAL:**

[174] Polyclonal antibodies are generally raised in animals by multiple subcutaneous (sc) or intraperitoneal (ip) injections of the relevant antigen and an adjuvant. It may be useful to conjugate the relevant antigen to a protein that is immunogenic in the species to be immunized, e.g., keyhole limpet hemocyanin, serum albumin, bovine thyroglobulin, or soybean trypsin inhibitor, using a bifunctional or derivatizing agent, for example, maleimidobenzoyl sulfosuccinimide ester (conjugation through cysteine residues), N-

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hydroxysuccinimide (through lysine residues), glutaraldehyde, succinic anhydride,  $\text{SOCl}_2$ , or  $\text{R}^1\text{N}=\text{C}=\text{NR}$ , where R and  $\text{R}^1$  are different alkyl groups.

**[175] ANTIBODY PREP – ADJUVANTS (ALL ABS):**

[176] Suitable adjuvants for the vaccination of animals for the production of polyclonal, monoclonal, and other antibodies include but are not limited to Adjuvant 65 (containing peanut oil, mannide monooleate, and aluminum monostearate); Freund's complete or incomplete adjuvant; mineral gels such as aluminum hydroxide, aluminum phosphate, and alum; surfactants such as hexadecylamine, octadecylamine, lysolecithin, dimethyldioctadecylammonium bromide, N,N-dioctadecyl-N',N'-bis(2-hydroxymethyl) propanediamine, methoxyhexadecylglycerol, and pluronic polyols; polyanions such as pyran, dextran sulfate, poly IC, polyacrylic acid, and carbopol; peptides such as muramyl dipeptide, dimethylglycine, tuftsin, stress proteins, core-containing proteins from a positive stranded RNA virus, *see* US Pat. No. 6,153,378; and, oil emulsions. The antigenic peptides could also be administered following incorporation into liposomes or other microcarriers.

[177] Information concerning adjuvants and various aspects of immunoassays are disclosed, *e.g.*, in the series by P. Tijssen, Practice and Theory of Enzyme Immunoassays, 3rd Edition (1987), Elsevier, New York. Other useful references covering methods for preparing polyclonal antisera include Microbiology, Hoeber Medical Division, Harper and Row (1969); Landsteiner, Specificity of Serological Reactions, Dover Publications, New York (1962); and, Williams, et al., Methods in Immunology and Immunochemistry, Vol. 1, Academic Press, New York (1967).

[178] Animals can be immunized against the antigen, immunogenic conjugates, or derivatives by combining 1 mg or 1  $\mu\text{g}$  of the peptide or conjugate (for rabbits or mice, respectively) with 3 volumes of Freund's complete adjuvant and injecting the solution intradermally at multiple sites. One month later the animals are boosted with 1/5 to 1/10 the original amount of peptide or conjugate in Freund's complete adjuvant by subcutaneous injection at multiple sites. Seven to 14 days later the animals are bled and the serum is assayed for antibody titer. Animals are boosted until the titer plateaus. Preferably, the animal is boosted with the conjugate of the same antigen, but conjugated to a different protein or through a different cross-linking reagent. Conjugates also can be made in recombinant cell culture as protein fusions. In addition, aggregating agents such as alum can be suitably used to enhance the immune response.

## (ii) Monoclonal Antibodies

**[179] ANTIBODY PREP - MONOCLONAL:**

5 **[180]** Monoclonal antibodies are obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present in minor amounts. For example, monoclonal antibodies can be made using the hybridoma method first described by Kohler and Milstein, *Nature*, 256:495 (1975), or can be made by recombinant DNA methods, or otherwise as desired.

10 **[181]** In the hybridoma method, a mouse, or other appropriate host animal, such as a hamster, is immunized as described herein to elicit lymphocytes that produce or are capable of producing antibodies that will bind specifically to the antigenic peptide used for immunization. Alternatively, lymphocytes may be immunized *in vitro*. Lymphocytes then are fused with myeloma cells using a suitable fusing agent, such as polyethylene glycol, to  
15 form a hybridoma cell, Goding, *Monoclonal Antibodies: Principles and Practice*, pp. 59-103, Academic Press (1986).

**[182]** The hybridoma cells thus prepared are seeded and grown in a suitable culture medium that preferably contains one or more substances that inhibit the growth or survival of the unfused, parental myeloma cells. For example, if the parental myeloma cells lack the  
20 enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine (HAT medium), which substances prevent the growth of HGPRT-deficient cells.

**[183]** Preferred myeloma cells are those that fuse efficiently, support stable high-level production of antibody by the selected antibody-producing cells, and are sensitive to a  
25 medium such as HAT medium, for example murine myeloma lines, such as those derived from MOPC-21 and MPC-11 mouse tumors available from the Salk Institute Cell Distribution Center, San Diego, CA USA, and SP-2 cells available from the American Type Culture Collection, Rockville, MD USA. Human myeloma and mouse-human heteromyeloma cell lines have also been described for the production of human monoclonal  
30 antibodies, Kozbor, *J. Immunol.*, 133:3001 (1984); Brodeur et al., *Monoclonal Antibody Production Techniques and Applications*, pp. 51-63, Marcel Dekker, Inc., New York (1987).



[184] Culture medium in which hybridoma cells are growing is assayed for production of monoclonal antibodies directed against the antigenic peptide. The binding specificity of monoclonal antibodies produced by hybridoma cells can be determined by immunoprecipitation or by an *in vitro* binding assay, such as radioimmunoassay (RIA) or enzyme-linked immunosorbent assay (ELISA). The binding affinity of the monoclonal antibody can, for example, be determined by the Scatchard analysis of Munson and Pollard, Anal. Biochem., 107:220 (1980). The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

[185] After hybridoma cells are identified that produce antibodies of the desired specificity, affinity, or activity, the clones may be subcloned by limiting dilution procedures and grown by standard methods (Goding, *supra*). Suitable culture media for this purpose include, for example, D-MEM or RPMI-1640 medium. In addition, the hybridoma cells may be grown *in vivo* as ascites tumors in an animal.

[186] The monoclonal antibodies secreted by the subclones are suitably separated from the culture medium, ascites fluid, or serum by conventional immunoglobulin purification procedures such as, for example, protein A-SEPHAROSE<sup>TM</sup>, hydroxyapatite chromatography, gel electrophoresis, dialysis, or affinity chromatography.

[187] DNA encoding the monoclonal antibodies can be readily isolated and sequenced using conventional procedures (*e.g.*, by using oligonucleotide probes that are capable of binding specifically to genes encoding the heavy and light chains of murine antibodies). The hybridoma cells serve as a preferred source of such DNA. Once isolated, the DNA may be placed into expression vectors, which can then be transfected into host cells such as *E. coli* cells, simian COS cells, Chinese hamster ovary (CHO) cells, or myeloma cells that do not otherwise produce immunoglobulin protein, to obtain the synthesis of monoclonal antibodies in the recombinant host cells. Review articles on recombinant expression in bacteria of DNA encoding antibody include Skerra et al., Curr. Opin. in Immunol., 5:256-262 (1993), and Pluckthun, Immunol. Revs., 130:151-188 (1992).

[188] **MOABS - COMBINATORIAL:**

[189] In a further embodiment, antibodies or antibody fragments can be isolated from antibody phage libraries generated using the techniques described in McCafferty et al.,

Nature, 348:552-554 (1990), using the proper antigen such as CD11a, CD18, IgE, or HER-2 to select for a suitable antibody or antibody fragment. Clackson et al., Nature, 352:624-628 (1991) and Marks et al., J. Mol. Biol., 222:581-597 (1991) describe the isolation of murine and human antibodies, respectively, using phage libraries. Subsequent publications describe the production of high affinity (nM range) human antibodies by chain shuffling, Marks et al., Biotechnology, 10:779-783 (1992), as well as combinatorial infection and *in vivo* recombination as strategies for constructing very large phage libraries, Waterhouse et al., Nuc. Acids. Res., 21:2265-2266 (1993). Combinatorial antibodies are also discussed in Huse et al., Science 246:1275-1281 (1989), and Sastry et al., Proc. Natl. Acad. Sci. USA, 86:5728-5732 (1989), and Alting-Mees et al., Strategies in Molecular Biology 3:1-9 (1990). These references describe a system commercially available from Stratacyte, La Jolla, CA USA. Briefly, mRNA is isolated from a B cell population and utilized to create heavy and light chain immunoglobulin cDNA expression libraries in the  $\lambda$ IMMUNOZAP(H) and  $\lambda$ IMMUNOZAP(L) vectors. These vectors may be screened individually or co-expressed to form Fab fragments or antibodies, *see* Huse et al., *supra*; *see also* Sastry et al., *supra*. Positive plaques can subsequently be converted to a non-lytic plasmid, which allows for high-level expression of monoclonal antibody fragments from *E. coli*.

**[190] HUMANIZED MOAB:**

**[191]** Binding partners can also be constructed utilizing recombinant DNA techniques to incorporate the variable regions of a gene that encode a specifically binding antibody. The construction of these binding partners can be readily accomplished by one of ordinary skill in the art in view of the present application. *See* Larrick et al., Biotechnology, 7:934-938 (1989); Riechmann et al., Nature, 332:323-327 (1988); Roberts et al., Nature, 328:731-734 (1987); Verhoeyen et al., Science 239:1534-1536 (1988); Chaudhary et al., Nature, 339:394-397 (1989); *see also* U.S. Pat. No. 5,132,405 entitled "Biosynthetic Antibody Binding Sites".) For example, the DNA can be modified by substituting the coding sequence for human heavy- and light-chain constant domains in place of homologous murine sequences, U.S. Pat. No. 4,816,567; Morrison, et al., Proc. Nat. Acad. Sci., 81:6851 (1984), or by covalently joining to the immunoglobulin coding sequence all or part of the coding sequence for a non-immunoglobulin polypeptide. In another example, DNA segments encoding the desired antigen-binding domains specific for the protein or peptide of interest are amplified from appropriate hybridomas and inserted directly into the genome of a cell that produces human

antibodies. See Verhoeyen et al., *supra*; see also Reichmann et al., *supra*. Some of these techniques transfer the antigen-binding site of a specifically binding mouse or rat monoclonal antibody or the like to a human antibody. Such antibodies can be preferable for therapeutic use in humans because they are typically not as antigenic as rat or mouse antibodies.

- 5 [192] In an alternative embodiment, genes that encode the variable region from a hybridoma producing a monoclonal antibody of interest can be amplified using oligonucleotide primers for the variable region. These primers may be synthesized by one of ordinary skill in the art, or may be purchased from commercially available sources. For instance, primers for mouse and human variable regions including, among others, primers for
- 10  $V_{H\alpha}$ ,  $V_{H\beta}$ ,  $V_{H\gamma}$ ,  $V_{H\delta}$ ,  $C_{H1}$ ,  $V_L$ , and  $C_L$  regions are available from Stratacyte (La Jolla, CA). These primers may be utilized to amplify heavy- or light-chain variable regions, which may then be inserted into vectors such as IMMUNOZAP<sup>TM</sup>(H) or IMMUNOZAP<sup>TM</sup>(L) (Stratacyte), respectively. These vectors may then be introduced into *E. coli* for expression. Utilizing these techniques, large amounts of a single-chain protein containing a fusion of the
- 15  $V_H$  and  $V_L$  domains may be produced, see Bird et al., Science 242:423-426 (1988).

**[193] ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES (ALL ABS):**

- [194] Non-immunoglobulin polypeptides can be substituted in monoclonal and other antibodies described herein for the constant domains of an antibody, or they can be
- 20 substituted for the variable domains of one antigen-combining site of an antibody to create a chimeric bivalent antibody comprising one antigen-combining site having specificity for an antigen and another antigen-combining site having specificity for a different antigen.

**[195] CHIMERICS:**

- [196] Chimeric or hybrid antibodies can also be prepared *in vitro* using known methods in
- 25 synthetic protein chemistry, including those involving crosslinking agents, in view of the present application. For example, immunotoxins may be constructed using a disulfide-exchange reaction or by forming a thioether bond. Examples of suitable reagents for this purpose include iminothiolate and methyl-4-mercaptobutyrimidate.

**[197] ANTIBODY LABELING (ALL ABS):**

- 30 [198] For diagnostic applications or otherwise as desired, and for monoclonal and other antibodies described herein, the antibodies and other binding partners typically will be labeled with a detectable moiety. The detectable moiety can be any moiety that is capable of

producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as  $^3\text{H}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ , or  $^{125}\text{I}$ ; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Any method known in the art for conjugating the antibody or binding partner to the detectable moiety may be employed, including those methods described by Hunter et al., *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.*, 40:219 (1981); and Nygren, *J. Histochem. Cytochem.*, 30:407 (1982).

10 (iii) Humanized And Human Antibodies

[199] **HUMANIZED AB GENERALLY:**

[200] Methods for humanizing non-human antibodies are well known in the art and have been discussed in part above. Generally, a humanized antibody has one or more amino acid residues introduced into it from a source which is non-human. These non-human amino acid residues are often referred to as "import" residues, which are typically taken from an "import" variable domain. Humanization can be performed essentially following the method of Winter and co-workers, Jones et al., *Nature*, 321:522-525 (1986); Riechmann et al., *Nature*, 332:323-327 (1988); Verhoeyen et al., *Science*, 239:1534-1536 (1988), by substituting rodent CDRs or CDR sequences for the corresponding sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies, U.S. Pat. No. 4,816,567, wherein substantially less than an intact human variable domain has been substituted by the corresponding sequence from a non-human species. In practice, humanized antibodies are typically human antibodies in which some CDR residues and possibly some FR residues are substituted by residues from analogous sites in rodent antibodies.

25 [201] The choice of human variable domains, both light and heavy, to be used in making humanized antibodies is very important to reduce antigenicity. According to the so-called "best-fit" method, the sequence of the variable domain of a rodent antibody is screened against the entire library of known human variable-domain sequences. The human sequence that is closest to that of the rodent is then accepted as the human framework (FR) for the humanized antibody. Sims et al., *J. Immunol.*, 151:2296 (1993); Chothia and Lesk, *J. Mol. Biol.*, 196:901 (1987). Another method uses a particular framework derived from the consensus sequence of all human antibodies of a particular subgroup of light or heavy chains.

The same framework may be used for several different humanized antibodies. Carter et al., Proc. Natl. Acad. Sci. USA, 89:4285 (1992); Presta et al., J. Immunol., 151:2623 (1993).

[202] It is typically desirable that antibodies be humanized with retention of high affinity for the antigen and other favorable biological properties. To achieve this goal, according to one method, humanized antibodies are prepared by a process of analysis of the parental sequences and various conceptual humanized products using three-dimensional models of the parental and humanized sequences. Three-dimensional immunoglobulin models are commonly available and are familiar to those skilled in the art. Computer programs are available that illustrate and display probable three-dimensional conformational structures of selected candidate immunoglobulin sequences. Inspection of these displays permits analysis of the likely role of the residues in the functioning of the candidate immunoglobulin sequence, *e.g.*, the analysis of residues that influence the ability of the candidate immunoglobulin to bind antigen. In this way, FR residues can be selected and combined from the consensus and import sequences so that the desired antibody characteristic, such as increased affinity for the target antigen(s), is achieved. In general, CDR residues are directly and most substantially involved in influencing antigen binding.

[203] It is also possible to produce transgenic animals (*e.g.*, mice) that are capable, upon immunization, of producing a full repertoire of human antibodies in the absence of endogenous immunoglobulin production. For example, it has been described that the homozygous deletion of the antibody heavy-chain joining region ( $J_H$ ) gene in chimeric and germ-line mutant mice results in complete inhibition of endogenous antibody production. Transfer of the human germ-line immunoglobulin gene array in such germ-line mutant mice will result in the production of human antibodies upon antigen challenge. *See, e.g.*, Jakobovits et al., Proc. Natl. Acad. Sci. USA. 90:2551-255 (1993); Jakobovits et al., Nature, 362:255-258 (1993); Bruggemann et al., Year Immuno., 7:33 (1993). Human antibodies can also be produced in phage-display libraries, Hoogenboom and Winter, J. Mol. Biol., 227:381 (1991); Marks et al., J. Mol. Biol., 222:581 (1991).

#### (iv) Antibody Fragments

[204] **ANTIBODY FRAGMENTS:**

[205] Various techniques have been developed for the production of antibody fragments. Such fragments can be derived via proteolytic digestion of intact antibodies, *see, e.g.*,

Morimoto et al., J. Biochem. Biophys. Meth. 24:107-117 (1992) and Brennan et al., Science, 229:81 (1985). Fragments can also be produced directly by recombinant host cells. For example, antibody fragments can be isolated from antibody phage libraries discussed above. Fab'-SH fragments can be directly recovered from *E. coli* and chemically coupled to form F(ab')<sub>2</sub> fragments, Carter et al., Biotechnology 10:163-167 (1992). F(ab')<sub>2</sub> fragments can be isolated directly from recombinant host cell culture. Other techniques for the production of antibody fragments will be apparent to the skilled practitioner.

#### (v) Bispecific Antibodies

##### 10 [206] BISPECIFIC ANTIBODIES GENERALLY:

[207] Bispecific antibodies (BsAbs) are antibodies that have binding specificities for at least two different antigens. Bispecific antibodies can be derived from full-length antibodies or from antibody fragments, *e.g.*, F(ab')<sub>2</sub> bispecific antibodies.

[208] Methods for making bispecific antibodies are known in the art. Traditional  
15 production of full-length bispecific antibodies is based on the coexpression of two immunoglobulin heavy chain-light chain pairs, where the two chains have different specificities, Millstein and Cuello, Nature, 305:537-539 (1983). Because of the random assortment of immunoglobulin heavy and light chains, these hybridomas (quadromas) produce a mixture of potentially 10 different antibody molecules, of which only one has the  
20 correct bispecific structure. Purification of the correct molecule, which is usually accomplished by affinity chromatography steps, is rather cumbersome, and the product yields are low. Similar procedures are disclosed in WO 93/08829, and in Traunecker et al., E.M.B.O. J., 10:3655-3659 (1991).

[209] According to another approach, antibody variable domains containing the desired  
25 binding specificities (antibody-antigen combining sites) are fused to immunoglobulin constant domain sequences. The fusion is preferably with an immunoglobulin heavy chain constant domain, comprising at least part of the hinge, C<sub>H</sub> 2, and C<sub>H</sub> 3 regions. It is preferred to have the first heavy-chain constant region (C<sub>H</sub> 1) containing the site necessary for light chain binding, present in at least one of the fusions. DNAs encoding the immunoglobulin  
30 heavy chain fusions and, if desired, the immunoglobulin light chain, are inserted into separate expression vectors, and are co-transfected into a suitable host organism. This provides for great flexibility in adjusting the mutual proportions of the three polypeptide fragments in

embodiments when unequal ratios of the three polypeptide chains used in the construction provide the improved yields. It is, however, possible to insert the coding sequences for two or all three polypeptide chains in one expression vector when the expression of at least two polypeptide chains in equal ratios results in high yields or when the ratios are of no particular  
5 significance.

**[210] ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:**

**[211]** In one embodiment of this approach, the bispecific antibodies are composed of a hybrid immunoglobulin heavy chain with a first binding specificity in one arm, and a hybrid immunoglobulin heavy chain-light chain pair (providing a second binding specificity) in the  
10 other arm. This asymmetric structure may facilitate the separation of the desired bispecific compound from unwanted immunoglobulin chain combinations, as the presence of an immunoglobulin light chain in only one half of the bispecific molecule provides for a facile method of separation. This approach is discussed in WO 94/04690. For further details of generating bispecific antibodies see, for example, Suresh et al., Meth. Enzymol., 121:210  
15 (1986).

**[212] ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":**

**[213]** Bispecific antibodies include cross-linked or "heteroconjugate" antibodies. For example, one of the antibodies in the heteroconjugate can be coupled to avidin, the other to biotin. Such antibodies have, for example, been proposed to target immune system cells to  
20 unwanted cells, U.S. Pat. No. 4,676,980), and for treatment of HIV infection, WO 91/00360, WO 92/200373, and EP 03089). Heteroconjugate antibodies may be made using any convenient cross-linking methods. Suitable cross-linking agents are well known in the art, and are disclosed in U.S. Pat. No. 4,676,980, along with a number of cross-linking techniques.

**25 [214] ANTIBODIES - DIABODIES:**

**[215]** The "diabody" technology described by Hollinger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993) has provided an alternative mechanism for making BsAb fragments. The fragments comprise a heavy-chain variable domain ( $V_H$ ) connected to a light-chain variable domain ( $V_L$ ) by a linker that is too short to allow pairing between the two domains  
30 on the same chain. Accordingly, the  $V_H$  and  $V_L$  domains of one fragment are forced to pair with the complementary  $V_L$  and  $V_H$  domains of another fragment, thereby forming two antigen-binding sites.

[216] Another strategy for making BsAb fragments by the use of single-chain Fv (sFv) dimers has also been reported. See Gruber et al., J. Immunol., 152:5368 (1994). These researchers designed an antibody comprising the V<sub>H</sub> and V<sub>L</sub> domains of a first antibody joined by a 25-amino-acid-residue linker to the V<sub>H</sub> and V<sub>L</sub> domains of a second antibody.

5 The refolded molecule bound to fluorescein and the T-cell receptor and redirected the lysis of human tumor cells that had fluorescein covalently linked to their surface.

[217] **ANTIBODIES - OTHER:**

[218] Techniques for generating bispecific antibodies from antibody fragments have also been described in the literature. For example, bispecific antibodies can be prepared using chemical linkage. Brennan et al., Science, 229:81 (1985) describe a procedure wherein intact antibodies are proteolytically cleaved to generate F(ab')<sub>2</sub> fragments. These fragments are reduced in the presence of the dithiol complexing agent sodium arsenite to stabilize vicinal dithiols and prevent intermolecular disulfide formation. The Fab' fragments generated are then converted to thionitrobenzoate (TNB) derivatives. One of the Fab'-TNB derivatives is then reconverted to the Fab'-thiol by reduction with mercaptoethylamine and is mixed with an equimolar amount of the other Fab'-TNB derivative to form the BsAb. The BsAbs produced can be used as agents for the selective immobilization of enzymes.

[219] Fab'-SH fragments can be directly recovered from *E. coli*, which can be chemically coupled to form bispecific antibodies. Shalaby et al., J. Exp. Med., 175:217-225 (1992) describe the production of a fully humanized BsAb F(ab')<sub>2</sub> molecule. Each Fab' fragment was separately secreted from *E. coli* and subjected to directed chemical coupling *in vitro* to form the BsAb. The BsAb thus formed was able to bind to cells overexpressing the HER2 receptor and normal human T cells, as well as trigger the lytic activity of human cytotoxic lymphocytes against human breast tumor targets. See also Rodriguez et al., Int. J. Cancers (Suppl.) 7:45-50 (1992).

[220] Various techniques for making and isolating BsAb fragments directly from recombinant cell culture have also been described. For example, bispecific F(ab')<sub>2</sub> heterodimers have been produced using leucine zippers. Kostelny et al., J. Immunol., 148(5):1547-1553 (1992). The leucine zipper peptides from the Fos and Jun proteins are linked to the Fab' portions of two different antibodies by gene fusion. The antibody homodimers are reduced at the hinge region to form monomers and then re-oxidized to form the antibody heterodimers.



b. Antibody Purification

**[221] ANTIBODY PURIFICATION GENERALLY:**

**[222]** When using recombinant techniques, the antibody can be produced intracellularly, in the periplasmic space, or directly secreted into the medium. If the antibody is produced intracellularly, as a first step, the particulate debris, either host cells or lysed fragments, is removed, for example, by centrifugation or ultrafiltration. Carter et al., Bio/Technology 10:163-167 (1992), describe a procedure for isolating antibodies which are secreted to the periplasmic space of *E. coli*. Briefly, cell paste is thawed in the presence of sodium acetate (pH 3.5), EDTA, and phenylmethylsulfonylfluoride (PMSF) over about 30 min. Cell debris can be removed by centrifugation. Where the antibody is secreted into the medium, supernatants from such expression systems are generally first concentrated using a commercially available protein concentration filter, for example, an Amicon or Millipore Pellicon ultrafiltration unit. A protease inhibitor such as PMSF may be included in any of the foregoing steps to inhibit proteolysis and antibiotics may be included to prevent the growth of adventitious contaminants.

**[223] BEFORE LPHIC:**

**[224]** The antibody composition prepared from the cells is preferably subjected to at least one purification step prior to LPHIC. Examples of suitable purification steps include hydroxyapatite chromatography, gel electrophoresis, dialysis, and affinity chromatography. The suitability of protein A as an affinity ligand depends on the species and isotype of any immunoglobulin Fc domain that is present in the antibody. Protein A can be used to purify antibodies that are based on human  $\gamma 1$ ,  $\gamma 2$ , or  $\gamma 4$  heavy chains, Lindmark et al., J. Immunol. Meth. 62:1-13 (1983). Protein G has been recommended for mouse isotypes and for human  $\gamma 3$ , Guss et al., E.M.B.O. J., 5:1567-1575 (1986). The matrix to which the affinity ligand is attached is often agarose, but other matrices are available. Mechanically stable matrices such as controlled pore glass or poly(styrenedivinyl)benzene allow for faster flow rates and shorter processing times than can be achieved with agarose. Where the antibody comprises a  $C_H 3$  domain, the Bakerbond ABX<sup>TM</sup> resin (J. T. Baker, Phillipsburg, N.J.) is useful for purification. Other techniques for protein purification such as fractionation on an ion-exchange column, ethanol precipitation, Reverse Phase HPLC, chromatography on silica, chromatography on heparin SEPHAROSE<sup>TM</sup>, chromatography on an anion or cation

exchange resin (such as a polyaspartic acid column), chromatofocusing, SDS-PAGE, and ammonium sulfate precipitation are also available depending on the antibody to be recovered.

**[225] LPHIC:**

**[226]** Following any preliminary purification step(s), the mixture comprising the antibody of interest and contaminant(s) can be subjected to LPHIC. See US Patent No. 6,214,984. Often, the antibody composition to be purified will be present in a buffer from the previous purification step. However, it may be necessary to add a buffer to the antibody composition prior to the LPHIC step. Many buffers are available and can be selected by routine experimentation. The pH of the mixture comprising the antibody to be purified and at least one contaminant in a loading buffer is adjusted to a pH of about 2.5-4.5 using either an acid or base, depending on the starting pH. The loading buffer can have a low salt concentration (e.g., less than about 0.25 M salt).

**[227]** The mixture is loaded on the HIC column. HIC columns normally comprise a base matrix (e.g., cross-linked agarose or synthetic copolymer material) to which hydrophobic ligands (e.g., alkyl or aryl groups) are coupled. One example of an HIC column comprises an agarose resin substituted with phenyl groups (e.g., a Phenyl SEPHAROSE<sup>TM</sup> column). Many HIC columns are available commercially. Examples include, but are not limited to, Phenyl SEPHAROSE 6 FAST FLOW<sup>TM</sup> column with low or high substitution (Pharmacia LKB Biotechnology, AB, Sweden); Phenyl SEPHAROSE<sup>TM</sup> High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); Octyl SEPHAROSE<sup>TM</sup> High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); FRACTOGEL<sup>TM</sup> EMD Propyl or FRACTOGEL<sup>TM</sup> EMD Phenyl columns (E. Merck, Germany); MACRO-PREP<sup>TM</sup> Methyl or MACRO-PREP<sup>TM</sup> t-Butyl Supports (Bio-Rad, California); WP HI-Propyl (C<sub>3</sub>)<sup>TM</sup> column (J. T. Baker, New Jersey); and TOYOPEARL<sup>TM</sup> ether, phenyl, or butyl columns (TosoHaas, PA).

**[228]** The antibody is typically eluted from the column using an elution buffer that is the same as the loading buffer. The elution buffer can be selected using routine experimentation in view of the present application. The pH of the elution buffer may be between about 2.5-4.5 and have a low salt concentration (e.g., less than about 0.25 M salt). It may not be necessary to use a salt gradient to elute the antibody of interest; the desired product may be recovered in the flow-through fraction that does not bind significantly to the column.

[229] The LPHIC step provides a way to remove a correctly folded and disulfide bonded antibody from unwanted contaminants (*e.g.*, incorrectly associated light and heavy fragments). The method can provide an approach to substantially remove an impurity characterized as a correctly folded antibody fragment whose light and heavy chains fail to  
5 associate through disulfide bonding. Antibody compositions prepared using LPHIC can be up to about 95% pure or more. Purities of more than about 98% have been reported. US Patent No. 6,214,984.

[230] **POST LPHIC:**

[231] Antibody compositions prepared by LPHIC can be further purified as desired using  
10 techniques which are well known in the art. Diagnostic or therapeutic formulations of the purified protein can be made by providing the antibody composition in a physiologically acceptable carrier, examples of which are provided below. To remove contaminants (*e.g.*, unfolded antibody and incorrectly associated light and heavy fragments) from the HIC column so that it can be re-used, a composition including urea (*e.g.*, 6.0 M urea, 1% MES  
15 buffer pH 6.0, 4 mM ammonium sulfate) can be flowed through the column.

c. Some Uses For Antibodies Described Herein

(i) Generally

[232] **GENERALLY:**

[233] The present invention comprises any suitable use for the antibodies and other  
20 binding partners discussed herein. The following provides some of the desired uses, including diagnostic and therapeutic uses. Various diagnostic and therapeutic uses for antibodies have been reviewed in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.* 53:189-  
25 204 (1990); and, Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)* 50(8):901-909 (1990), for example.

[234] **ASSAYS:**

[235] The antibodies can be used in immunoassays, such as enzyme immunoassays. BsAbs can be useful for this type of assay; one arm of the BsAb can be designed to bind to a  
30 specific epitope on the enzyme so that binding does not cause enzyme inhibition, the other arm of the antibody can be designed to bind to an immobilizing matrix ensuring a high enzyme density at the desired site. Examples of such diagnostic BsAbs include those having

specificity for IgG as well as ferritin, and those having binding specificities for horseradish peroxidase (HRP) as well as a hormone, for example. Monoclonal and polyclonal antibodies are also exemplary antibodies for immunoassays.

[236] The antibodies can be designed for use in two-site immunoassays. For example, two antibodies are produced binding to two separate epitopes on the analyte protein; one antibody binds the complex to an insoluble matrix, the other binds an indicator enzyme.

**[237] DIAGNOSTIC USES:**

[238] Antibodies can also be used for immunodiagnosis, *in vitro* or *in vivo* or otherwise, of various diseases or conditions based on the presence or absence of a particular GPCR. Such diseases and conditions include, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and

cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

- 5 [239] To facilitate this diagnostic use, an antibody that binds a particular GPCR, when such is differentially expressed in tumors or other target diseases, can be conjugated with a detectable marker (*e.g.*, a chelator that binds a radionuclide). Examples of tumor-associated antigens being used in a similar fashion include an antibody having specificity for the tumor-associated antigen CEA used for imaging colorectal and thyroid carcinomas and the anti-  
10 p185<sup>HER2</sup> antibody used for detecting cancers characterized by amplification of the HER2 protooncogene. Other uses for the antibodies of the present invention will be apparent to the skilled practitioner in view of the present application.

(ii) Assays

15 [240] ASSAYS:

[241] For certain applications such as some diagnostic and other assay applications, the antibody typically can be labeled directly or indirectly with a detectable moiety. The detectable moiety can be any moiety that is capable of producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as <sup>3</sup>H,  
20 <sup>14</sup>C, <sup>32</sup>P, <sup>35</sup>S, or <sup>125</sup>I; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or HRP.

[242] Any method known in the art for separately conjugating the antibody to the detectable moiety may be employed, including those methods described by Hunter et al.,  
25 Nature, 144:945 (1962); David et al., Biochemistry, 13:1014 (1974); Pain et al., J. Immunol. Meth. 40:219 (1981); and, Nygren, J. Histochem. and Cytochem. 30:407 (1982).

[243] The antibodies of the present invention may be employed in any desired assay method, such as competitive binding assays, direct, and indirect sandwich assays, and immunoprecipitation assays. Zola, Monoclonal Antibodies: A Manual of Techniques, pp.  
30 147-158 (CRC Press, Inc. (1987).

[244] COMPETITIVE BINDING ASSAYS:

[245] Competitive binding assays rely on the ability of a labeled standard to compete with the test sample analyte for binding with a limited amount of antibody. The amount of analyte in the test sample is inversely proportional to the amount of standard that becomes bound to the antibody. To facilitate determining the amount of standard that becomes bound, the antibody generally is insolubilized before or after the competition, so that the standard, and analyte that are bound to the antibody may conveniently be separated from the standard, and analyte which remain unbound.

[246] BsAbs are particularly useful for sandwich assays which involve the use of two molecules, each capable of binding to a different immunogenic portion, or epitope, of the sample to be detected. In a sandwich assay, the test sample analyte is bound by a first arm of the antibody which is immobilized on a solid support, and thereafter a second arm of the antibody binds to the analyte, thus forming an insoluble three part complex. *See, e.g.,* U.S. Pat. No. 4,376,110. The second arm of the antibody may itself be labeled with a detectable moiety (direct sandwich assays) or may be measured using an anti-immunoglobulin antibody that is labeled with a detectable moiety (indirect sandwich assay). For example, one type of sandwich assay is an ELISA assay, in which case the detectable moiety is an enzyme. Assays are discussed further elsewhere herein in relation to binding partners such as antibodies, and antigenic peptides for particular GPCRs, including assays searching for or using such antigenic peptides, and would be apparent to those skilled in the art in view of the present application.

### (iii) Affinity Purification

#### [247] AFFINITY PURIFICATION:

[248] The antibodies also are useful for the affinity purification of an antigen of interest such as a particular GPCR from sources such as recombinant cell culture or natural sources.

### (iv) Therapeutics

#### [249] THERAPEUTIC USES:

[250] Therapeutic compositions, and uses, etc., for the antibodies described herein will now be discussed. As with other parts of this application, this section does not contain the entire discussion of therapeutic uses or compositions, etc., for antibodies; other sections discuss both antibodies, and therapeutics, and the discussion in this section applies to certain

other aspects discussed herein. Turning to antibodies and therapeutics, the antibodies can be used, for example, for redirected cytotoxicity (*e.g.*, to kill tumor cells), as a vaccine adjuvant, for delivering thrombolytic agents to clots, for delivering immunotoxins to tumor cells, for converting enzyme activated prodrugs at a target site (*e.g.*, a tumor), for treating infectious diseases or targeting immune complexes to cell surface receptors.

**[251] THERAPEUTIC FORMULATIONS:**

**[252]** Therapeutic formulations of the antibody can be prepared for storage by mixing the antibody having the desired degree of purity with optional physiologically acceptable carriers, excipients, or stabilizers (Remington's Pharmaceutical Sciences, 16th edition, Osol, A., Ed. (1980), for example in the form of lyophilized cake or aqueous solutions. Acceptable carriers, excipients, or stabilizers are nontoxic to recipients at the dosages, and concentrations employed, and include buffers such as phosphate, citrate, and other organic acids; antioxidants including ascorbic acid; low molecular weight (less than about 10 residues) polypeptides; proteins, such as serum albumin, gelatin, or immunoglobulins; hydrophilic polymers such as polyvinylpyrrolidone; amino acids such as glycine, glutamine, asparagine, arginine, or lysine; monosaccharides, disaccharides, and other carbohydrates including glucose, mannose, or dextrans; chelating agents such as EDTA; sugar alcohols such as mannitol or sorbitol; salt-forming counterions such as sodium; or nonionic surfactants such as Tween, Pluronic, or polyethylene glycol (PEG).

**[253]** The antibodies also may be entrapped in microcapsules prepared, for example, by coacervation techniques or by interfacial polymerization (for example, hydroxymethylcellulose or gelatin-microcapsules, and poly-[methylmethacrylate] microcapsules, respectively), in colloidal drug delivery systems (for example, liposomes, albumin microspheres, microemulsions, nano-particles, and nanocapsules), or in macroemulsions. Such techniques are disclosed in Remington's Pharmaceutical Sciences, *supra*.

**[254] THERAPEUTIC FORMULATIONS -STERILE:**

**[255]** An antibody to be used for *in vivo* human administration should be sterile. This can be accomplished by filtration through sterile filtration membranes, for example prior to or following lyophilization and reconstitution. The antibody ordinarily will be stored in lyophilized form or in solution. Therapeutic antibody compositions generally are placed into

a container having a sterile access port, for example, an intravenous solution bag or vial having a stopper pierceable by a hypodermic injection needle.

**[256] THERAPEUTIC ADMINISTRATIONS:**

**[257]** The route of antibody administration is in accord with known methods, *e.g.*,  
5 injection or infusion by intravenous, intraperitoneal, intracerebral, intramuscular, intraocular, intraarterial, or intralesional routes, or by sustained release systems as noted below.

**[258]** The antibody can be administered, for example, continuously by infusion or by bolus injection. Suitable examples of sustained-release preparations include semipermeable matrices of solid hydrophobic polymers containing the protein, which matrices are in the  
10 form of shaped articles, *e.g.*, films, or microcapsules. Examples of sustained-release matrices include polyesters, hydrogels (*e.g.*, poly(2-hydroxyethyl-methacrylate) as described by Langer et al., J. Biomed. Mater. Res., 15:167-277 (1981), and Langer, Chem. Tech., 12:98-105 (1982), or poly(vinylalcohol)), polylactides, U.S. Pat. No. 3,773,919; EP 58,481, copolymers of L-glutamic acid and gamma ethyl-L-glutamate, Sidman et al., Biopolymers,  
15 22:547-556 (1983), non-degradable ethylene-vinyl acetate, Langer et al., *supra*, degradable lactic acid-glycolic acid copolymers such as the LUPRON DEPOT<sup>TM</sup> (injectable microspheres composed of lactic acid-glycolic acid copolymer and leuprolide acetate), and poly-D-(-)-3-hydroxybutyric acid, EP 133,988.

**[259] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-POLYMERS:**  
20

**[260]** While polymers such as ethylene-vinyl acetate and lactic acid-glycolic acid sustain release of molecules for over 100 days, certain hydrogels release proteins for shorter time periods. When encapsulated antibodies remain in the body for a long time, they may denature or aggregate as a result of exposure to moisture at 37°C, resulting in a loss of  
25 biological activity and possible changes in immunogenicity. Rational strategies can be devised for antibody stabilization depending on the mechanism involved. For example, if the aggregation mechanism is discovered to be intermolecular S-S bond formation through thio-disulfide interchange, stabilization may be achieved by modifying sulfhydryl residues, lyophilizing from acidic solutions, controlling moisture content, using appropriate additives,  
30 and developing specific polymer matrix compositions.

**[261] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-LIPOSOMES:**



[262] Sustained-release antibody compositions also include liposomally entrapped antibody. Liposomes containing the antibody can be prepared by methods such as those in DE 3,218,121; Epstein et al., Proc. Natl. Acad. Sci. USA, 82:3688-3692 (1985); Hwang et al., Proc. Natl. Acad. Sci. USA, 77:4030-4034 (1980); EP 52,322; EP 36,676; EP 88,046; EP 5 143,949; EP 142,641; Japanese patent application 83-118008; U.S. Pat. Nos. 4,485,045 and 4,544,545; and EP 102,324. Ordinarily the liposomes are of the small (about 200-800 Angstroms) unilamellar type in which the lipid content is greater than about 30 mol. % cholesterol, the selected proportion being adjusted for the optimal antibody therapy.

[263] **THERAPEUTICALLY EFFECTIVE AMOUNT:**

10 [264] An effective amount of antibody to be employed therapeutically will depend, for example, upon the therapeutic objectives, the route of administration, and the condition of the patient. Accordingly, it will be necessary for the therapist to titer the dosage and modify the route of administration as required to obtain the optimal therapeutic effect. A typical daily dosage might range from about 1 µg/kg to up to 10 mg/kg or more, depending on the factors  
15 mentioned above. Typically, the clinician will administer antibody until a dosage is reached that achieves the desired effect. The progress of this therapy is easily monitored by conventional assays.

5. DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR  
20 ANTIBODIES THERETO

[265] **DISEASE/CONDITIONS LIST:**

[266] The peptides and antibodies of the present invention can serve as valuable tools for designing drugs for treating various pathophysiological conditions such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-  
25 related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (e.g., osteoarthritis, osteoporosis), carcinoma (e.g., basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung  
30 small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne

muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (e.g., by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (e.g., anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (e.g., chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved or that would be readily apparent to those skilled in the art in view of the present application.

## EXAMPLES

[267] The Examples below provide information as follows: Example 1 relates to the identification and selection of the antigens set forth in Figure 2. Examples 2 to 4 relate to antibody production and purification based on such antigens. Examples 5 to 10 relate to H&E staining. And, Example 11 relates to Western blot analyses.

### EXAMPLE 1: SELECTION OF ANTIGENS

[268] Antigenic peptides were derived from the amino acid sequence of a particular GPCR based on analyses of likely antigen-containing regions and specificity of those regions for the protein/gene of interest. The specificity of the antigen peptides (approximately 20 amino acids in length) for antibody generation was determined using the outlined techniques, including BLAST of several public databases. These public databases included but were not limited to GenBank, Swiss Prot Human, Swiss Prot NonHuman, GenPeptH, GenPept M, and

LifeSpan's proprietary databases. With respect to specificity, parameters that precluded the use of a particular peptide included the presence of 6 or more contiguous amino acids with sequence identity to protein(s) other than the protein of interest, the presence of sites of posttranslational modification, including phosphorylation and glycosylation, and highly hydrophobic sequences, which could indicate potential *in situ* localization within the plasma membrane. The peptides were analyzed for antigenicity using the published algorithm of Hopp, T. P., and Woods, K. R, Proc. Natl. Acad. Sci. U.S.A. 78, 3824-3828, (1981). Additional considerations in antigenic peptide design included 1) selection against sequences with multiple prolines in a row, 2) selection against sequences with multiple serines in a row, 3) selection against sequences with multiple lysines in a row, 4) selection against sequences with multiple arginines in a row 5) selection against sequences with multiple aspartic acids in a row, 6) selection against sequences with multiple glutamic acids in a row, 7) selection against peptides containing methionine or tryptophan, which can become oxidized as a result of the cyclization reaction, and 8) avoidance of stretches of 5 or more amino acids having no uncharged amino acids (which also resulted in a desirable charge to peptide length ratio of at least 1 charge:5 residues). The selected antigenic peptides are set forth in the Sequence Listing and in Figure 2.

#### EXAMPLE 2: ANTIBODY PRODUCTION SCHEDULE

- [269] Day 0 - Pre-immune serum collection (approximately 5.0 ml). Immunize using 200 µg antigen peptide per rabbit in Complete Freund's Adjuvant.
- [270] Day 14 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [271] Day 28 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [272] Day 42 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [273] Day 49 - First production bleed; obtain 24.0 - 26.0 ml.
- [274] Day 56 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [275] Day 63 - Second production bleed and ELISA analysis.

[276] Day 70 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.

[277] Day 77 - Third production bleed and affinity purification.

5                   EXAMPLE 3: IMMUNOSORBENT PURIFICATION OF ANTISERUM:  
                  COUPLING OF PEPTIDE TO CNBR-ACTIVATED SEPHAROSE 4B

[278] Weigh out 0.8 g of CNBr-activated Sepharose 4B (2.5 ml of final gel volume). Wash and re-swell on sintered glass filter with 1 mM HCl, followed by coupling buffer (0.1 M NaHCO<sub>3</sub>, 0.25 M NaCl, pH 8.5). Dissolve 10 mg of protein or peptide in coupling buffer.

10 Mix protein solution with gel suspension and incubate 2 hours at room temperature or overnight at 4°C. Block remaining active groups with 0.2 M glycine buffer, pH 8.1. Wash away excess adsorbed protein with coupling buffer, followed by 0.1 M acetate buffer containing 0.5 M NaCl, pH 4.3. Equilibrate the column with phosphate-buffered saline (PBS), pH 7.7.

15                   EXAMPLE 4: IMMUNOSORBENT PURIFICATION OF ANTISERUM:  
                  AFFINITY PURIFICATION OF ANTISERUM

[279] Dilute 10 ml of clear antiserum 1:1 with PBS, pH 7.7, apply to affinity column at a flow rate of 0.3 ml/minute, and monitor absorbance of eluate at 280 nm. Collect fractions of  
20 unbound material and rinse column with PBS, pH 7.7. Elute bound antibody with 0.2 M glycine, pH 1.85, and collect eluate until absorbance at 280 nm returns to baseline. Neutralize all collected fractions with 1 M Tris-HCl, pH 8.5 immediately after collection. Determine OD at 280 nm, and determine the total OD recovered. Conduct ELISA analysis  
25 and the removal of all antibody from the original serum. Concentrate antibody to approximately 2.0 mg/ml and dialyze against PBS with 0.01% NaN<sub>3</sub>.

                  EXAMPLE 5: PREPARATION OF ANTIBODY DILUTIONS

[280] The purpose of this protocol is to dilute antibodies in solution. Materials include  
30 Tris-HCL Buffer with carrier protein and 0.015 M NaN<sub>3</sub> (Dako Antibody Diluent #S0809 (DAKO, Carpinteria, CA); vials containing the antibodies described above or commercial antibodies against the particular GPCR; pipetmen and disposable tips; container of chopped ice; 12 ml Dako reagent tubes; and, reagent tube rack.

[281] The procedure is a) calculate proportions of antibody and diluent according to desired concentrations and volume requirements; b) label reagent tubes and place in rack; c) pipette needed volume of diluent into tube(s); d) place vials of antibodies into ice; e) invert and/or flick antibody vial(s) 3 or 4 times to insure suspension; f) pipette required volume of antibody(s) into corresponding diluent volumes; and, g) mix gently.

#### EXAMPLE 6: PREPARATION OF AUTOSTAINER SOLUTIONS

[282] The purpose of this protocol is the preparation of concentrated solutions for use in a DAKO autostainer. Materials include DAKO<sup>®</sup> TBST (Tris Buffered Saline Containing Tween-S3306), 10X Concentrate, DAKO<sup>®</sup> Target Retrieval Solution, 10x Concentrate (S1699), deionized H<sub>2</sub>O, 20L container, with lid, marked at the 10L level, DAKO<sup>®</sup> TBS (Tris Buffered Saline-S1968), and DAKO Tween<sup>®</sup> (S1966).

[283] The procedure to make TBST 10x Concentrate is a) pour 2 500 ml bottles DAKO<sup>®</sup> TBST into a 20 L container, b) add deionized H<sub>2</sub>O until solution level is at 10 L mark, c) replace lid and shake 10 to 20 times, d) pour diluted DAKO<sup>®</sup> TBST into autostainer carboy(s) as designated. The procedure to make Target Retrieval Solution is a) measure 135 ml of deionized H<sub>2</sub>O and pour into slide bath, b) measure 15 ml of DAKO<sup>®</sup> Target Retrieval solution, c) add to H<sub>2</sub>O, and d) agitate. This solution is then used in the steam method of target retrieval, Example 9, below. The procedure to make TBS is a) fill 20L container to 10L mark with deionized H<sub>2</sub>O, b) add 2 envelopes of DAKO<sup>®</sup> TBS, c) add 5 ml of DAKO TWEEN<sup>®</sup>, and d) replace lid and agitate 10 to 20 times.

#### EXAMPLE 7: PREPARATION OF SOLUTIONS FOR ANTIBODY DETECTION

[284] Solutions for antibody detection are prepared using Vector<sup>®</sup> Biotinylated antibody (BA series), Vectastain<sup>®</sup> ABC-AP Kit (AK-5000), 10 mM sodium phosphate, pH 7.5, 0.9% saline (PBS), Vector<sup>®</sup> Red Alkaline Phosphatase Substrate Kit I (SK-5100), and 100 mM Tris-HCl, pH 8.2 Buffer. To prepare biotinylated antibody, add 10 ml of PBS to reagent tube, add 1 drop biotinylated antibody to the PBS, then mix gently. To prepare ABC, to 10 ml of PBS, add 2 drops each of Reagent A and Reagent B, mix immediately, then allow to stand 30 minutes before use. To prepare AP Red, which should be prepared immediately

before use, to 5 ml of Tris-HCl buffer, add 2 drops of Reagent 1 and mix well, add 2 drops of Reagent 2 and mix well, then add 2 drops of Reagent 3 and mix well.

#### EXAMPLE 8: DEPARAFFINIZATION AND REHYDRATION OF SAMPLES

5 [285] The purpose of this protocol is to remove paraffin from and rehydrate preserved tissues in preparation for IHC procedures. Materials and equipment include fume hood, vertical slide rack(s), three xylene (VWR #72060-088) baths, three 100% alcohol blend (VWR #72060-050) baths, two 95% alcohol blend (VWR #72060-052) baths, one 70% alcohol blend (VWR #72060-056) bath, and Tris-Buffered Saline (DAKO® S1968) + Tween® (DAKO S1966).

[286] Insert the slides into the vertical rack(s). Move slides through baths inside fume hood as follows:

15 Xylene 5 Minutes  
Xylene 5 Minutes  
Xylene 5 Minutes  
100% Alcohol 2 Minutes  
100% Alcohol 2 Minutes  
100% Alcohol 1 Minute  
20 95% Alcohol 2 Minutes  
95% Alcohol 2 Minutes  
70% Alcohol 1 Minute

[287] Finally, place slides into a container with TBST.

#### EXAMPLE 9: STEAM METHOD OF TARGET RETRIEVAL

25 [288] The purpose of this protocol is to optimize antibody binding within paraffin embedded tissues. Materials and equipment included a steamer, deionized H<sub>2</sub>O, target retrieval solution, 10X concentrate (DAKO #S1699), 250 ml graduated cylinder, 15 ml graduated cylinder, staining dish(es), and deparaffinized and rehydrated tissue on microscope slides in immersed TBST. The procedure is to a) fill the steamer with deionized H<sub>2</sub>O to appropriate depth as indicated, b) turn the steamer on, c) in a graduated cylinder, measure 135ml of deionized H<sub>2</sub>O and pour into staining dish(es), d) pipette 15ml of target retrieval solution and release into deionized H<sub>2</sub>O, e) place the staining dish(es) into the basket of the steamer and heat for at least 10 minutes to preheat, f) add rack(s) containing tissue slides to heated target retrieval solution, g) cover and steam for 20 minutes, h) remove container from

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steamer and let stand at room temperature for 20 minutes, i) transfer rack(s) with slides to container(s) of TBST, and j) slides are now ready for staining procedures.

#### EXAMPLE 10: ANTIBODY DETECTION

- 5 [289] The deparaffinized, rehydrated, and steamed (if needed) slides are loaded onto racks within a DAKO autostainer and then the autostainer is run according to the manufacturer's instructions. The slides are removed and the autostainer is turned off.

#### EXAMPLE 11: WESTERN BLOTTING

- 10 [290] The purpose of this protocol is to visualize the immunoreactivity of the antibodies described above against the particular GPCR on a western blot. Materials and equipment included western blot membrane, TBS Tween (TBST: 100 mM Tris-HCl pH 7.5, 150 mM NaCl, 0.1% Tween<sup>TM</sup> 20), 5% non-fat dried milk in TBST (blotto), antibody of interest (primary), peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) (secondary) –  
15 Jackson ImmunoResearch, ECL solution (Amersham Biosciences, Uppsala Sweden), film, developer D-19, fixer, rocking platform.

- [291] During the blotting procedure, the blot is kept wet at all times and on a substantially level surface. The Western blot is placed right-side up in 10 ml of blotto. The membrane is flipped over and the dish rocked so that the solution covered it. The membrane is then  
20 flipped back to the right side and solution is again rocked over it. The blot is then placed on a shaker for at least 1 hour. Ten ml of primary antibody are prepared by diluting 1:500 in blotto.

- [292] The blotto is removed from the Western blot and replaced with the primary antibody. The blot is flipped again and placed on the shaker for 1 hour. Secondary antibody  
25 and peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) are prepared 1:20,000 in 10 ml of blotto. The primary antibody is removed and the Western blot is washed 3 times with 10 ml of blotto. The blotto is removed and replaced with the secondary antibody solution. The blot is flipped and placed on the shaker for 1 hour. The secondary antibody is removed and the blot washed 2 times with 10 ml of blotto. The blotto is removed and the blot is  
30 washed 2 times with 10 ml TBST. ECL is prepared by combining equal amounts of Solution 1 and 2.

[293] The blotto is removed and 1 ml of ECL is placed on the blot. The blot is flipped and let sit for 1 minute. The blot is placed on plastic wrap and immediately covered with plastic wrap. The ECL is pressed out. The blot is placed on the film, then the film is developed.

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[294] From the foregoing, it will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without deviating from the spirit and scope of the invention. Accordingly, the invention includes all permutations and combinations of the subject matter set forth herein

10 and is not limited except as by the appended claims.



## WHAT IS CLAIMED IS:

1. An isolated antigenic peptide according to any one of SEQ ID NOS. 692-2292.
- 5 2. An isolated antigenic peptide comprising an amino acid sequence that is at least about 90% identical to a sequence set forth in any one of SEQ ID NOS. 692-2292.
3. An isolated antigenic peptide that is an analog of an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
4. An isolated antigenic peptide comprising a short antigenic amino acid  
10 sequence that is identical to at least 5 consecutive amino acids set forth in any one of SEQ ID NOS. 692-2292.
5. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any one of SEQ ID NOS. 692-  
15 2292.
6. A kit for the detection of antibodies against a particular GPCR in a sample comprising:
  - a) an isolated antigenic peptide according to any one of claims 1-5 and derived from the particular GPCR, and
  - 20 b) at least one of a reagent or a device for detecting the antibodies.
7. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151,  
25 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187,  
30 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.
8. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is at least about 90% identical to any

one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using the peptide sequence that is  
5 at least about 90% identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

9. An isolated antibody having high specificity and high affinity or avidity for a  
10 particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the  
15 peptide sequence that is the analog to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

10. An isolated antibody having high specificity and high affinity or avidity for a  
20 particular GPCR comprising a peptide sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced  
25 using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

30 11. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955,  
5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270,  
10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

12. An isolated antibody specific for a particular GPCR comprising a peptide  
15 sequence that is at least about 90% identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679,  
20 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using the peptide sequence that is at least about 90% identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086,  
25 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 13. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is the analog to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

14. An isolated antibody specific for a particular GPCR comprising a peptide 15 sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 20 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 25 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 15. A kit for the detection of antibodies against the particular GPCR of claim 5 comprising:

a) an isolated antibody according to any one of claims 7-14, and

b) at least one of a reagent or a device for detecting the antibody.

16. An assay for the detection of a particular GPCR in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 1-5,

b) contacting the isolated antigenic peptide with the sample under conditions suitable  
5 and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific  
for the particular GPCR present in the sample, to provide an antibody-bound antigenic  
peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether  
the sample contains the particular GPCR.

10 17. The assay of claim 16 further comprising the step of binding the isolated  
antigenic peptide or the antibody to a solid substrate.

18. The assay of claim 16 or 17 wherein the sample is an unpurified sample.

19. The assay of any one of claims 15-18 further comprising, prior to the  
contacting, obtaining the sample from a human being.

15 20. The assay of any one of claims 15-19 wherein the assay is selected from the  
group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a  
radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay  
(ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an  
immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an  
20 immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a  
biosensor assay, and a low-light detection assay.

21. An isolated nucleic acid molecule encoding an antigenic peptide according to  
any one of SEQ ID NOS. 692-2292.

22. The isolated nucleic acid molecule according to claim 21 wherein the  
25 molecule encodes a naturally occurring human antigenic peptide.

23. An isolated nucleic acid molecule encoding an antigenic peptide that is at least  
about 90% identical to any one of the antigenic peptides set forth in SEQ ID NOS. 692-2292.

24. The isolated nucleic acid molecule according to claim 23 wherein the  
antigenic peptide is at least about 95% identical to the antigenic peptide.

30 25. The isolated nucleic acid molecule according to claim 23 or 24 wherein the  
molecule encodes a naturally occurring human antigenic peptide.

26. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292 to genomic DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

5           27. A method of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence wherein the antigenic peptide has a length of about 5 to about 100 amino acids, the method comprising:

          a) searching the candidate polypeptide sequence using a comparison window of the length, and

10           b) selecting against amino acid sequences of the length and having at least 3 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising  
15 no charged amino acids.

          28. The method of claim 27 wherein the method further comprises selecting against at least 5 of the characteristics.

          29. The method of claim 27 wherein the method further comprises selecting against at least 7 of the characteristics.

20           30. The method of claim 27 wherein the method further comprises selecting against the 9 characteristics.

          31. The method of any one of claims 27-30 wherein the method further comprises:

          c) selecting against amino acid sequences of the length and having at least one of the following additional characteristics 1) sequences having at least 5 consecutive amino  
25 acids that are identical to an alternative amino acid sequence from an alternative polypeptide that is different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences.

          32. The method of claim 31 wherein the posttranslational modification sites are phosphorylation or glycosylation sites.

30           33. The method of claim 31 or 32 wherein the method further comprises selecting against at least 2 of the additional characteristics.

34. The method of claim 31 or 32 wherein the method further comprises selecting against the 3 additional characteristics.

35. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

5 36. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST analysis for the candidate polypeptide sequence.

37. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 50 amino acids.

38. The method of any one of claims 27-36 wherein the antigenic peptide has a  
10 length from 6 amino acids to about 20 amino acids.

39. The method of any one of claims 27-36 wherein the antigenic peptide has a length of about 20 amino acids.

40. The method of any one of claims 27-39 wherein the polypeptide is a protein.

41. The method of any one of claims 27-40 wherein the polypeptide is a human  
15 protein.

42. The method of any one of claims 27-41 wherein the polypeptide is a naturally occurring protein.

43. An isolated antigenic peptide that is specific for the candidate polypeptide of any one of claims 27-42 that is produced according to the method of any one of claims 27-42.

20 44. An antigenic peptide that is at least about 90% identical to the isolated antigenic peptide of claim 43.

45. An isolated antigenic peptide that is an analog of the isolated antigenic peptide of claim 43.

46. An isolated antigenic peptide comprising a short antigenic amino acid  
25 sequence that is identical to at least 5 consecutive amino acids of the isolated antigenic peptide of claim 43.

47. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids of the isolated antigenic peptide of claim  
30 43.

48. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 in a sample comprising:

a) an isolated antigenic peptide according to any one of claims 43-47 and derived from the candidate polypeptide, and

b) at least one of a reagent or a device for detecting the antibodies.

49. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 43, wherein the antibody was produced using the isolated antigenic peptide of claim 43.

50. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 44, wherein the antibody was produced using the isolated antigenic peptide of claim 44.

51. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 45, wherein the antibody was produced using the isolated antigenic peptide of claim 45.

52. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 46, wherein the antibody was produced using the isolated antigenic peptide of claim 46.

53. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 47, wherein the antibody was produced using the isolated antigenic peptide of claim 47.

54. The isolated antibody of any one of claims 49-53 wherein the antibody has high specificity and high affinity for the candidate polypeptide.

55. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 comprising:

a) an isolated antibody according to any one of claims 49-53, and

b) at least one of a reagent or a device for detecting the antibody.

56. An assay for the detection of a candidate polypeptide in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 43-47,

b) contacting the isolated antigenic peptide with the sample under conditions suitable and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the candidate polypeptide present in the sample, to provide an antibody-bound antigenic peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the candidate polypeptide.



57. The assay of claim 56 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.

58. The assay of claim 56 or 57 wherein the sample is an unpurified sample.

59. The assay of any one of claims 56-58 further comprising, prior to the  
5 contacting, obtaining the sample from a human being.

60. The assay of any one of claims 56-59 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an  
10 immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

61. An isolated nucleic acid molecule encoding an antigenic peptide according to any one of claims 43-47.

15 62. The isolated nucleic acid molecule according to claim 61 wherein the molecule encodes a naturally occurring human antigenic peptide.

63. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in claims 43-47.

64. The isolated nucleic acid molecule according to claim 63 wherein the  
20 antigenic peptide is at least about 95% identical to the antigenic peptide.

65. The isolated nucleic acid molecule according to claim 63 or 64 wherein the molecule encodes a naturally occurring human antigenic peptide.

66. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of claims 43-47 to genomic  
25 DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	SpeciesName
526	160397	Latrophilin-2	NP_036434.1	<p>MVSSGCRMRS LWFIIVISFL PNTEGFSRAA LPFGLVRREL SCEGYSIDL RCPGSDVIMIE  SANYGRITDDK ICDADPFQME NTD CYLPDAF KIMTQRCNNR TQCIVVTGSD  VFPDPCPGTY KYLEVQYECV PYIFVCPGTL KAIQNSPCYI EAEQKAGAWC  KDLQAADKI YFMPWTPYRT DTLIEYASLE DFQNSRQYTTI YKLPNRVDGT  GFVVYDGA VF FNKERTRNIV KFDLRTRKS GEAINYANY HDTSPYRWGG  KTDIDLAVDE NGLWVIYATE QNNGMIVISQ LNPYTLRFEA TWETVYDKRA  ASNAFMICGV LYVVRVYQD NESETGKNSI DYTYNTRLNR GEYVDVPPFN  QYQYIAA VDY NPRDNQLYVW NNNFILRYSL EFGPPDPAQV PTTAVTITSS  AELFKTILST TSTTSQK GPM STTVAGSQEG SKGTKPPPAV STTKIPITN IFPLPERFCE  ALDSKGKWP QTRGMMVER PCPKGTRGTA SYLCMISTGT WNPKGPDLSN  CTSHWVNQLA QKIRSGENAA SLANELAKHT KGPVFA GDVS SSVRLMEQLV  DILDAQLOEL KPSEKDSAGR SYNKAIVDTV DNLLRPEALE SWKHMNSSEQ  AHTATMLLDT LEEGAFVLAD NLEPTRVSM PTENIVLEVA VLSTEGQIQD  FKFPLGKGA GSSIQLSANT VKQNSRNGLA KL VFIYRSL GQFLSTENAT IKLGADFIGR  NSTIAVNSHV ISVSINKESS RVYLTDPVLF TLPHIDPDNY FNANCSFWNY  SERTMMGYWS TQGCKLVDTN KTRTTCACSH LTNFAILMAH REIAYKDG VGH  ELLLTVTWV GIVISLVCLA ICITFCFFR GLQSDRNTIH KNLINLFIA EFILIGIDK  TKYAIACPIF AGLLHFFLA AFAWMCLEGV QLYLMLVEVF ESEYSRKYY  YVAGYLFPAT VVGVSAAIDY KSYGTEKACW LHVDNYFIWS FIGPVTFIL LNIIFL VITL  CKMVKHSNLT KPDSSRLNLIKSWVLGAFAL LCLLGLTWSF GLLFINEETI  VMAYLFTFN AFQGVFIFF HCALOKKVRK EYKGCFRHSY CCGGLPTESP  HSSVKASTTR TSARYSSGTQ SRURRMWNTD VRKQSESSFI SGDINSTSTL  NQGHSLNNAR DTSAMDITLP NGNFNNSYSL HKGDYNDVSQ VVDCGLSLND  TAFEKMIISE LVHNNLRGSS KTHNLELTP VKPVIGGSS EDDAIVADAS  SLMHSNDNPGLELHKELEAP LPQRTTHSL YQPQKKVKSE GTDSVVSQLT  AEAEHLQSP NRDSLYTSMPLNRDSPYTES SPDMEEDLSP SRRSENEIDY  YKSMFNLGAG HQLQMCYQIS RGNSDGYIIP INKEGCIPEG DVREGQMQLV TSL</p> <p>ccgcggctgg gagacagcga gccagagctt gggigtgtt gcgagagcca cggcgggggc tggggcgatg gggcgccatg  gctgaaggct gcgctctgca acctgaaga gccgcctgcat tgaagaggcca gggacagggga gaccggctgg atggcagagc  gcggccccc cgcctgcggc gggcgggccc ggcctggcctg gcgccttgcg ccgccttgcg tgcctctggc cgtccatgga  gcagcgaggaa gggcgaaact ccggaagcgc gcgcttgcgg ccgccttgcg ccgccttgcg aaggggccga gcccgcgagg  accgcggagg aagagagccc cgcctccagcc cgcagggccc cggccggggc cggccggggc acatcgaggag gcagcgaggc  gagcagcgcc gcgggagagg ccggcgcgagg agggcgccgc agcaatggcc cggccggctg ggcctgctg cttcctggcc  ctggggctgc tgggctggc cggcgccagc ggcggcgcc cgcctctg cgcggcgccc tgcagctggc acggcgacgc  tcgggtggac tgcctgggga aggggctgac ggccttgcg gaggggctca gcgcttcc ccaagcgtg gatacagta  tgaacaacat tactcagttg ccagaagatg cattaaaga ctttcctt ctagaagagc tacaatggc gggcaacagc cttcttta  tcaccccaaa ggcctgtct ggggtgaag aactcaaat tcaacgctc cagataatc agttgaatac agttaccagc  gaagccattc gaggggctgag tgccttgcg tcttgcgt tagatgccaa ccalattacc tcatgcccg aggcaggtt tgaaggact</p>	P	Homo sapiens
527	160411	G Protein-Coupled Receptor GPR48	NM_018490		A	Homo sapiens

gttacgttac gggacatctgt gctggatgac aacagcttga cggagggggcc tgggacccc ctacggcaalc tggccaccc  
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 gttatttca agaaacaggt gctaaata taattgtgt aaaaatgcaa tggccaagca atgtatgac ttttgaagaac aataataga  
 ctgaaagg acttaggtg tagtagga alataatgt agttttct gatttttct gatttttct agcacaagt atacctatt gttattag  
 cacaagataa agaaacagctg taataatt taaaatct aittaaat gttatttt ataacgaaag aaaaatct gctaattha  
 cctaattt calctaat ctacggcaaa ctactgtcag gggccaaaaa ggggactgtcc cagctagaac tggtagga  
 lacaaggca ttacttat agttttac tggccatct tgaataaga gaaataaaa ttgtttta gcaattata aatcaaaaac  
 ctgaagagt tttaaaaca atattaaacg ctgttaggtt aaaaaatag ctggacatt gttttcagc attatcat gtttggcc  
 aatcagtaatt ttittctaa gtttttg ataacatc tagaaaaaaa gtaaaaggct aatgtctgtg tgggtttagt cgtttgtct  
 aaactiaaa ctatgtggg gtttaag tagtggggg attgtgtgtg ttactata gttctata atgaatct octaatctog  
 ttggcttac taattttc caattgtc ggaigtccac tagcaatagc ttggatata tagaaagtaa actgtgtgtca atactgtcat  
 taatagac gaaagggga gtaattatga caggaaglac ttatgttat ttctatgta gttgattat ctggaacctg tctataaa  
 tggaaattc calactat cccatataa ttittataa agggccat tcaatagctc agagggtga cttgtgttaa acaagataat

P Homo sapiens

P

528 160411 G Protein-Coupled Receptor GPR48 NP\_060960.1

atgttattaa taataataga agaagaaga alaaagctta gtctgtgtc tttaaaatt aaaaatttta ctgattccc aictatgggc  
tttagacct ttactgggtg gactttaaa gtaataatg ttcaataatg ttttgaca gtgtgctaaa tcaatagcaa acccactggc  
atattgta ttctgaatat actaaaaaa tccagctaga ttgagttta ataatatca ttgataact gtgcatataa tgaatttta  
tctatgtaa attatttta gaacacaagt tgggaaagt ggcttgtt catttggt aataaagt acctoataa ctatagtggc  
tgcagtagc agactgtaa atgtgtgtt atatactt tgcattgaa atagcttgg ttgtacatg tcatgtaat aaaaacagaa  
tcttgata tcaaatcat gtagttgta taaaatgg gaaggattta ttacatgt gtgtatgt tttaaggcca actattaca  
agtttaaaa atgtatca tglataita cacatgtat aataatana tcaatactg tgaagaaact cctaattaaa aggtttttc  
caaaattcac gtatgaaa attttcatt ttattcatt aaaaactaga ataacagata taataaagt ttaatttgg tctataagg  
tatgaatac aatattgac tcatgttt gaattattaa agttttaga aagcaaaaa a  
MPGGLGLLCLF LALGLGSAG PSGAAPPLCA APCSCDGD RR VDCSGKGLTA  
VPEGLSAFTQ ALDISMNNIT QLPEDAFKNF PFLEELQLAG NDLSFHPKA  
LSGLKELVL TLQNNQLKTV PSEAIRGLSA LQSLRLDANH ITSVPDSFE  
GLVQLRHLWL DDNSLTEVPV HPLSNLPTLQ ALTLALNKIS SIPDFAFTNL  
SSLVVLHLHN NKIRGLSQHC FDGLDNLETL DLSYNNLGEF POAIKARPSL  
KELGFHSNSI SVIPDGA FDG NPLLRTHLY DNLPSFVGN ASHNSDLHS  
LVIRGASMVQ QFPNLGTGVH LESLTLGTGK ISSIPNNLCQ EQKMLRTLDL  
SYNNIRDLPS FNGCHALEEI SLQRNQYQI KEGTFQGLIS LRILDLRNL IHEHSRAFA  
TLGPITNLDV SFNELTSFPT EGPNGNLQKL LVGNFKLKEA LAAKDFVNLR  
SLSVYAYQC CAFWGCD SYA NLNTEDNSLQ DHSVAQEKGT ADAANVTSTL  
ENEEHSQIII HCTPSTGAFK PCEYLLGWSM IRLTVWFIL VALFFNLLVL LTFASCTSL  
PSSKLFIGLI SVSNLFMGYI TGLTFLDAV SWGRFAEFGI WWETGSGCKV  
AGFLAVFSE SAIFLLMLAT VERSLSAKDI MKNGKSNHLK QFRVAALSAF  
LGATVAGCFP LFHRGEYSAS PLCLPFTTGE TPLSGFTVTL VLLNSLAFL  
MAVYTKLYC NLEKEDLSEN SQSSMIKHVA WLIFTNCF CPVAFFSFAP LIT AISPE  
IMKSVTLIFF PLPACLPVL YVFFNPKE DWKLLKRRVT KKS GSVSVSI  
SSQGGCLEQD FYYDCGMYSH LQGNLTVCDC CESFLLTKPV SCKHLKSHS  
CPALAVASCQ RPEGYWSDCG TQSAHSDYAD EEDSFVSDSS DQVQACGRAC  
FYQSRGFPLV RYAYNLPRVK D  
aacttgaaagg gcagccgtt gccgccacg aacactct caagcactt gagtgaccac ggcttgcaag ctgggtggctg  
gcccccgag tccgggctc tgaggcacgg ccgtcgactt aagcgtgca tctgttacc tggagacct ctgagcttc  
acctgtact tctgcgcgtg ctctgcaca gagcccgagg gaggaacct ccaggatgca gggtccgaac agcaocggcc  
cggacaacgc gacgtgcag atgtgcgga acccgcgat cgcggcgat cgcggcgat cgcggcgat tctactcgt gggtggcgcg  
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gggtatcgg gggtgctgt tgcacgtg tgcacgtg cttitacga aacatgati ccagcatct caccatgac  
tgtatcagcg tggagcgctt cctgggggtc ctgtacccgc tcatctccaa ggcttgcgcg cgcgcgtgtt acggtggcg  
cgcgtgtgca gggaactggc tctgtctct gacggccgtg tcccgctgg cgcgcacga tctcaactac ccgggtgacg  
ccctggggcat calcactgc ttgagctcc tcaagtggac gatgtcccc agcgtggcca tgggtggcgt gtctcttc  
accalcitca tctgtgtt cctatcccc ttgtgtatca ccgtggcttg ttacagggcc accatctca agctgttggc  
cacggaggag gcgcacaggcc gggaagcagcg gggtggcgtg ccgggtgggt ctgtcggtt ttgtcacct

A Homo sapiens

A

529 160435 LS160435 Receptor AX147830

530	160435	LS160435 Receptor	LR80	<p>gcttcgcccc caacaacttc gctcctcctgg cgcacatcgt gaggccgctg tttaacaggca agagctacta ccacgtgtac  aagctcacgc tgtctctcag ctgctcaac aactgtctgg accgttgt ttattacti gctgccccgg aattccagct ggcctctggg  gaaatttgg gctgcccggg ggtgcccaga gacacctgg acacgcccgg cgaagccctc ttctccggca ggaccacgic  ctgtc-gctcc gaggccggg cgaacctga agggatgga gaggccaca ggcocggcct cagagggcag gaggatgtgt  tctgagttcc gggggcgcag ctggagagc gggggcgcga gcttgagga ttacagggggc cagggagagg ccacggggcc  agaggttcag ggaagacagc tgcgtgtc ccagggcagc cagagggccc gtaggggaagg gtcctcaggc ttattctc  ccaggcactg cagaggcacc ggtgaggaag ggtctcagg ctacactcag gtagagaa caagcaagg ccagcagcgc  acagggtgt ttattctg cagagggtgc ctgctcctct ctgtgcagg gtagagctg tgcaccag ccggctaat ttgtattt  tttttag agctgggctg tcaaccccga gctcttga cactcac accgtcat accggaggat gggatitcaa  ccagccccc cgcctaccg actgggttc tggatctct ctgtgggga actgcaggcc cactccag ctctctcc  tgcgtacalc gtcctiagc acactgtcc ataccggag atggatitc aaaccggccc accgctiacc cgcctgggt  tctggalat ctctgtggg gaactgcag cccattccc agctcttc ctgtctga tgccttca gttgtgtc tggcctctc  cactctcc cagggttct ggtctccta gcccgtgca cgcgaaat tctgtatt tcatcagg gcactgtgt tgcgtgtgt  ggaattctc tttagagga ggcctgggg cctctgcaag tcaactact tccgtgcca ctccctca cacacaccc  ccctcgtc ggaatc</p>	P	Homo sapiens
531	160889	Platelet Activating Receptor Homolog (H963)	NM_013308	<p>MQVPNSTGPD NATQLMRNP AIAVALPVVY SLVAAVSIPG NLFSLWVLCR  RMGPRSPSVI FMNLSVTDL MLASVLPFQI YYHCNRHHWV FGVLNCNVVT  VAFYANMYSS ILTMTCSVE RFLGVLYPLS SKRWRRRRYA VAACAGTWLL  LLTALSPLAR TDLTYPVHAL GIITCFDVLK WTMLPSVAMW AVFLTFIFIL LFLIPFVTV  ACYTATILKL LRTEEAHGRE QRRRAVGLAA VLLAFVTCF APNNFVLLAH  IVSRLFYGKS YYHVYKLTLC LSCLNCLDP FVYFASREF QLRRLREYLGC  RRVPRDRLDT RRESLSFART TSVRSEAGAH PEGMEGATRP GLQRQESVF  gaaatggcc aaaggcgt atgtctct gaagactgc agcaaggcti gctgaggtc acagaagata gccacgtgt  ttggaggtg ttgaaatg gattctgaga tcaactgac tgaactggaa tctgtgtt atactiacc agctacaaa ccttgagtc  ttaaaaa ttcttca ataaagcag atcttact tcccaaga tgaacaacag tgcctctc tgcacgti ataaatct  ggagccatc acgtatttt ttatttatt ttctgtt ggaattatg gaagtgtt tgcacccgtg gctttatc agaagaalac  gaatcacagg tgtgtgaga tctactaat taattgtt acagccgatt tctgtctac tctgacata ccagtgaaaa ttgtgtga  cttgggtgt gcacttga agctgaagat attccatgc caagtaacag cctgctcat ctatcaat atgtattat caattact  cttagcatt gicagatg accgtgtct tcaactgaca cacagctgca agatcaccg aatacaagaa cccggattg  ccaaatgat atcaacgtt ggtgtctaa tggctctct taaatgggt ccaaatatga tgaatccat caagacacatc aaggaaaaat  caaatgtgg tgtatggag ttaaaaaagg aaattggcat tigtgtgcaa attctatg ttagcaata ttittaaat  tctagccat catttaata tcaatgcc ttgtaatg acagcttacc agaaacaaag ataatgaaaa ttaccacaaat gtagaaaaag  ctctatcaa calacttta gtagcacagg gctacatcat atgttgtt ccttaacca tigtccgaat ccgtatacc ctacggcaga  cagaagatcat aactgtatg tcaaccagga ttactctt caaagocaaa gaggctacac tgcctcggc tgtgtgaaac ctgtgtgtg  atctatct gtaatacac ctctcaaaag cattccgtc aaaggctact gaggcttgg cctacctaa agagaccag  gctcagaaa gaaaaaaag atgtgaaat aatgtcaaaa agacaggat ttgtgtca ccaattcgg cctactgga ccataaagt  aattatgct tgaagata aaaaaaaa aaaaaggccc gc</p>	A	Homo sapiens
532	160889	Platelet Activating Receptor	NP_037440.1	<p>MTNSSFFCPV YKDLEPFTYF FYLVFLVGII GSCFATWAFI QKNTNHRCSV  IYLINLLTAD FLTLALPVK IVVDLGVAPW KLKIFHCQVT ACLIYNMYL SIIFLAFVSI  DRCLQLTHSC KIYRIQEPGF AKMISTVVWL MVLLIMVPNM MPIKDIKEK</p>	P	Homo sapiens



535	161214	Galanin Receptor GalR3	NM_003614	<p>GKRRSSLDGS ESAKTSLQVT NLVSAIVFLY DSLTGVPLV VSFFSLKSDS  APPWMVLAVL WCSMAQITLL PSFIWSCERY RADVRTVWEQ CVAIMSEEDG  DDDGCCDDYA EGRVCKVRFD ANGATGPGSR DPAQVKLLPG RHMLFPPLER  VHYLQVPLSR RLSHDETNI STPREPGSFL HKWSSDDIR VLPASRALG  GPPEYLGQRH RLEDEEDEEE AEGGGLASLR QFLESGLVGS GGGPPRGPFG  FREEITTFID ETPLPSPTAS PGHSPPRRPR LGLSPRRLSL GSPESRAVGL PLGLSAGRRR  SLTGEESAR AWGSGWPGN PIFPQLTL</p> <p>tccaggtgc ccgtctgat gggagatggc tgaigccag aacattcac tggacagccc agggagatgic ggggocgtgg  cagtccctgt ggtcttggc ctatcttc tgcitggcac agtgggcaat gggctgtgtgc tggcagtgct cctgcagcct  ggcccgatgic cctggcagga gctggcagc accagggacc tgtatcct caactggcg gggctgacc tcttctcat  cctgtgtgc gggccctc agggccacct ctacagctg gatgocctggc tcttggggc cctgtgtgc aaggocgtgc  acctgtcat ctactacc atgtaccca gcagctttac gctggctgt gctocgtgg acagtiact ggcctgtgcg  catccgtgc gctgcgcgc cctgcgcacg ccggtatag ccgocgcgc agtggggctg gttgggtgc tggcggtgcct  cttctggcg cctactca gctactcgg caocgtgcgc tacggcgcg tggagctctg cgtgcocgc tgggagggacg  cgcgccggcg ggcctggcac gttggccact tgcitggcg ctactgtgc cctgtgtgc tgggtgagct ggcctacggg  cgcacgtgc gcttctgt ggcggcggtg ggtccgcgc gctctacgg ctctgtggg gtcagaccca cgtgtctalc ctgtgtct  cgcgggcg gcatgtgg cgtgtggcg gctctacgg ctctgtggg gtcagaccca cgtgtctalc ctgtgtct  ggtactggcg cttgccttc agccggcca cctacggct ccgctggcc tcaactgc tggcctacgc caactctgc  ctcaacgc tegtactgc gctgcctgc cgcacttc ggcgggtcti ccgocgccti tggcggtgc ggcocggacg  ccgcaacct gcccgcgcg cttgtgtgc gttccgcgc gctgtgcgc gccacccg cgtcccgga gacgcccgc  ctaggggag gctgtgct ggtggcgcc agggcccgga gccagggag ggcacgtcc acggcgga ggtgtccga  ggacggat aacactgc gctggact cgtctgt</p>	A	Homo sapiens
536	161214	Galanin Receptor GalR3	NP_003605.1	<p>MADAQNISLD SPGSVGAVV PVVFLIFLL GTVGNGL VLA VLLQPGPSAW  QEPGSTIDLF ILNLAVALDC FILCCVPFQA TITLDAWLF GALVCKAVHL  LIYLTMYASS FTLAASVDR YLAVRHPLRS RALRTPNAR AAVGLVWLLA  ALFSAPYLSY YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAVV  SLAYGRTLRF LWAAVGPAGA AAEEARRRAT GRAGRAMLAV AALYALCWGP  HHALICFWY GRFAFSPATY ACRLASHCLA YANSCLNPLV YALASRHFA  RFRLWPCGR RRRHRARRAL RVRPASSGP PGCPGDARPS GRLLAGGGQG  PEPREGPVHG GEAAARGPE</p> <p>atggcgctga ccccgatgc ccgagcagc ttccctggc tggccgccac cggcagctct gtcggcgagc cgcctggcg  cccaacgca acctcaaca gctctggc cagcccgacc gaggccagct ccttggagga cctgtgggc accggcaca  ttgggactct gcttggcg tggcggtg tggcggtg gggcagcc tacacagc ggtgtacgt cgtgtccct  cgtgcgtg gctccatga cgtctacg gtaacctg cgttggcg cgtgtgtac cgtctcagca tcccttcat  cgtggccac tacgtacca agaggtgca cttcgggcac gttgggtgc gctgtctt cggcctggac ttctgaca  tgacggcag catcttacc ctagacgca tggagcagca gtcgtacgt gtcgtgtgc ggcgtgtg caocgtgcag  cgcccaagg gtaacgcaa gctgtgtgc cttggcact ggtgtgtgc acgtgtcccg tgaigtg  caltggtg gtcggcggg gtcacagg cctgtgtgc ccccggtgg ccccggtgc ccaocggcc taactgacg  tgtcttgc caccagc gtcggggcg ggtgtgtcat cgtgtgtc tacggtgc tggcccgcc ctacggcg  tgccagcg cctcttcaa gcccggcg cggccggcg cgcgcgc gctgtgtgt gtcgtgtc tggcgcatc tgcgtctt</p>	P	Homo sapiens
537	161221	Urotensin-II Receptor (GPR14)	NM_018949	<p>atggcgctga ccccgatgc ccgagcagc ttccctggc tggccgccac cggcagctct gtcggcgagc cgcctggcg  cccaacgca acctcaaca gctctggc cagcccgacc gaggccagct ccttggagga cctgtgggc accggcaca  ttgggactct gcttggcg tggcggtg tggcggtg gggcagcc tacacagc ggtgtacgt cgtgtccct  cgtgcgtg gctccatga cgtctacg gtaacctg cgttggcg cgtgtgtac cgtctcagca tcccttcat  cgtggccac tacgtacca agaggtgca cttcgggcac gttgggtgc gctgtctt cggcctggac ttctgaca  tgacggcag catcttacc ctagacgca tggagcagca gtcgtacgt gtcgtgtgc ggcgtgtg caocgtgcag  cgcccaagg gtaacgcaa gctgtgtgc cttggcact ggtgtgtgc acgtgtcccg tgaigtg  caltggtg gtcggcggg gtcacagg cctgtgtgc ccccggtgg ccccggtgc ccaocggcc taactgacg  tgtcttgc caccagc gtcggggcg ggtgtgtcat cgtgtgtc tacggtgc tggcccgcc ctacggcg  tgccagcg cctcttcaa gcccggcg cggccggcg cgcgcgc gctgtgtgt gtcgtgtc tggcgcatc tgcgtctt</p>	A	Homo sapiens

538	161221	Urotensin-II Receptor (GPR14)	NP_061822.1	<p>ctgggcctgc ttcttgccct tctggctgtg gcagctgctc gccagctacc accaggccccc gcctgggcggc gggaaggggcgc gcatgctcaa ctacttgacc acctgctca cctacggcaaa cagctgctgc aacccttcc tctacagct gctcaccagg aactaccgc accacttgc cggccggctg cggggccgg gcagcggggg aggcggggg cccgttccct cccgtcagcc ccggccgc ttccagctt gttcgccgc ctcctgtct tctcagcc cagacccac tgacagctc gttctggccc cagggccc ggcccgact ggcggagg gtcacgggc cccggcgga MALTPESPSS FPGLAATGSS VPEPPGGPNA TLNSSWASPT EPSSLEDLVA TGTTGTLSS MGVGWVGNA YTLVVTCSL RAVASMYVYV VNLALADLLY LLSIPFVAT YVTKWHFGD VGCRLFLGLD FLTMHASIFT LTVMSERYA AVLRPLDTVQ RPKGYRKLLA LGTWLLALL TLPVMLAMRL VRRGPKSLCL PAWGPRAHRA YLTLLFATSI AGPGLLIGLL YARLARAYRR SQRASFKRAR RPGARALRLV LGIVLLFWAC FLPFWLWQLL AQYHQAPLAP RTARIVNYLT TCLTYGNSCA NPFLYTLTR NYRDHLRGRV RGPSSGGGRG PVPSLQPRAR FQRCGRSLSS SCSPQPTDSL VLAPAAPARP APEGPRAPA</p>	P	Homo sapiens
539	161249	G Protein- Coupled Receptor GPR66	NM_006056	<p>atggcttgca atggcagctgc ggccaggggg cacttgacc ctgaggacti gaactgacti gacgaggcac tgaactcaa gtactgggg oocagcaga cagagctgtt calggccatc tggccacat actgtctgat ctctgggtg ggctgtgtg gcaatgggtt gaactgtctg gtacatctgc gccacaaggc catgcgcacg cctaccaat actacctt cagcttgccc gtctggacc tctgtgtgt gctgtgtggc ctgcccctgc agctctatga gatgtggcac aactacct tctctgtgg cgttgggg tctatitcc gcagctact gttgagatg gttctgtctgg cctcagctc caactgact gcccgtgagc tggaaacta tttggccgtg gtgcacccac tccaggccag gtccatgggt agcggggccc atgtggccg agtgttggg ggcgtctggg gtctgtccat gctctgtccc ctggccaaca ccagcttcca cggcatccgg cagctgcacg tgcctggcc gggccaagt ccagactcag ctgtttgcat gctgtgtccc ccaggggccc tctacaacat ggtatgtcag accaocggc tgccttctt ctgctgccc atggccaalca tgaagctgt ctactgtct atgtggctg gactgtggcg ggagaggctg ctgtcagc agggagccaa gggaagggg tctgcaagcag ccaggtccag ataccctgc aggtctcagc agcagalog gggccaagaga caagtgaoca agatgtgtt tttctggctc gttgtgttg gcatctgtg ggccccgtt cagccgacc ggctatgtg agcgtctg tcaatgttga cagatggctt gcaatggcc ttccagcag tgcagctcat ctccggcatc ttcttacc tgggtctggc ggccaacccc gtgtcttata gctctatgc cagccgttc cgaagagacct tccaggaggc cctgtgctc gggtgtgtt gcatgtgct cagaccccgc cagactccc acagctcag caggtatgacc acaggcagca ccctgttga tttgggtccc ctggcagctt gggtccaccc cctggctggg aacgatggcc cagaggcgca gcaagagacc gatcatct ga</p>	A	Homo sapiens
540	161249	G Protein- Coupled Receptor GPR66	NP_006047.1	<p>MACNGSAAARG HFDPEDNLNLT DEALRLKYLQ PQTELFMPI CATYLLFVV GAVGNGLTCL VLRHKAMRT PTNYLYFLSLA VSDLLVLL VG LPLELYEMWH NYPFLGVGG CYFRTLLFEM VCLASVNLNT ALSVERYVAV VHPLOARSMV TRAHVRRVLG AVWGLAMLCs LPNTSLHGIR QLHVPCRPV PDSAVCMLVR PRALYNMVQ TTALLFFCLP MAIMSVLYLL IGLRLRRL LLMQEAQGRG SAAARSRYTC RLQHDRGRR QVTKMLFVL VVFGICWAPF HADRVMWVSV SQWTDGLHLA FQHVHVISGI FFYLGSAANP VLYSLMSSRF RETFQEAALCL GACCHRLRPR HSSHLSRMT TGSTLCDVGS LGSVVHPLAG NDGPEAQQET DPS atggctaacc ttgacaata cactgaaca ttcaagatgg gtacgaacag taccagcact gctgaattt actgaattg cactaatgt aaattcaat actccctda tgcacacc tatactca tatcttcc tggctctg gctaacagtg cagcctgtg gggtctgtgc cgttcaatca gcaagaaaaa taaagccatc atttcaatga tcaactctc ttgtgtctgac ctgtctcatg tattactti</p>	P	Homo sapiens
541	161251	Purinergic Receptor P2Y10	NM_014499		A	Homo sapiens



542	161251	Puriner- Receptor P2Y10	NP_055314.1	<p> acccttccgg atttactt acaatcagcca ccactggcct ttccagagag ccctttgctt gctctgcttc taccigaggt atctcaaat  gtaatcagc atttttcc tgaatgcat cagtcttcaa aggttgcttt ttctctcaa gccctcagg gccagagact ggaagcgttag  gtacgatg ggcacatg ctgcatctg gacatctg ggcactgctt gtttccatt tccatctg agaagcacag  acttaacaa caacaagtcc tcttttctg atcttgata caagcaaatg aatgcatg cgttgctcgg gatgatata gttgctgagc  ttgcaggat ttgatcca gtaicatca tgcagtggt tacttgga actactat ctttgagaca gccaccaatg gcttccaag  tttaacatga gaggcagaaa gcatcgcca tgggttcat gttgctgca gttcttca tctgttcc tccatcatc ataatctta  ttttttac calggtaaa gaaacatca ttgcatggt tccgtgttc cgaatgcac tgaattcca cctttttg ctgtgcttg  caagtctg ctgctttg gatcaatc ttattact tatgtctca gattttcgg accaatc ccgccaatgg agttctgtga  ccgttcccg cctatgagc aaggagagtg gttcatcat gattgtctaa  MANLDKYTET FKMGSTST AEIYCNVTNV KFQYSLYATT YLIFPGLL  ANSAALWVLC RFISKKNKAI IFMINLSVAD LAHVLSPLR IYYYISHHWP  FQRALCLLCF YLKYLNMYAS ICFLTCSLQ RCFFLLKPR ARDWKRRYDV  GISAAIWIVV GTACLPFPI RSTDLNNKS CFADLGKQM NAVALVGMT  VAELAGFVPI VIIAWCTWK TTISLRQPPM AFQISERQK ALRMVFMCAA  VFFICFTPYH INFYTMVK ETISSCPV RIALYFHPFC LCLASLCLL DPILYYFMAS  EFRDQLSRHG SSVTRSRUMS KESGSSMIG </p>	P	Homo sapiens
543	161293	G Protein- Coupled Receptor Ls161293 [Herpes virus]	NP_042597.1	<p> LDDVDYEESA PCYKSDITRL AAQVVPALYL LVFLGLLGN ILVVIIVRY  MKIKNLTNML LLNLAISDLL FLTLFWMH YIGMYHDWTF GISLCKLRG  VCYMSLYSQV FCILLTVDR YLA VVYAVTA LRFTVTGCI VTCVCTWFLA  GLLSLPEFF HGHQDDNGRV QCDDPYPEMS TNVWRRAHVA KVMLSLILP  LLIMAVCYV IIRLLRRPS KKKYKAIRLI FVMVAYFVF WTPYNIVLLL  STFHATLLNL QCALSSNLDL ALLITKTIVAY THCCINPVY AFVGEKFRRH  LYHFFHTYVA IYLCYIPFL SGDEGKEGP TRI  gagagaaacc cgaatgacc gggccacggc ggtccccga cctggccgt cctgcccggc gctgctggct ccggggcacic  gggtcggcc ccaatggct cggccgcccgg gaacttgagc gctggggggc gctggggggc gcccggccgg gcccggctga  ggaactgac cttctcccg gcccgaaccg cgtcccgic cccggcccg tctgggagcg cctgcccgg cccggcccg  gggacccgt tctgcagcc gcccggggc gttgcgctct ggtctgctggc ctacggcgcc gttggggccg tggcggtgt  cggcaacctc gttgtgact ggaatggtct ggccacacag cgtalggga cgttaccacaa cttctctc ttgaaactgg  ccttcggga cggcccalg gcccggctca acggcgctgt caacttalc taccgctgc acgggagagtg gtaactggc  gccaactact gcccgttcca gaactctc cccatcacg cgtgttcgc cagcatctac tccatgacgg ccatcgcggt  ggacagatcac atggccatt ttgacccct gaagccacgg cgtctgcca cggccacccc gattgcatc ggaagcatct  ggatttggc atttactt gatttctc agttgtctga ttccaaatc aaatgcalc caggccggctac tctttctac gttcagtggc  cagaaggttc aaggcaacat ttacgtacc acatgactc calcgctc gttgtact ttctttgt calcatgggc atcaactca  ccatagtgg aatcacgctc tggggagggg agatccagg agacacctgc gacaaatgacc agggagcagct gaaaggccaag  cggaaagggtg taaaatgat gattcagt gttgtgact ttggcatctg ctggctggcc taccatct acttactt caccggcatc  tatcagcagc tgaacagggtg gaaatcacat caggcaggct acctggccag ctctggctg gccaatgact cgaaccatgta  caaccocalc atctactgt gttgataa gattttgt gttggctca agagggctt ccgctgggtc cttttatcc agcttccag  ctacgacgag ctggagctca aagccacag gttccaccca atggcgaaga gcaagctata cacagtgaca agaatggagt  ccatggagct gttatcgac tccacagtg ggagacagtg caggctcagt caccagaaaga gaggagacgac caggagacga </p>	P	Equine herpesviri s 2
544	177147	Neuromedin K Receptor-Like (NK-4R)	NM_006679	<p> gagagaaacc cgaatgacc gggccacggc ggtccccga cctggccgt cctgcccggc gctgctggct ccggggcacic  gggtcggcc ccaatggct cggccgcccgg gaacttgagc gctggggggc gctggggggc gcccggccgg gcccggctga  ggaactgac cttctcccg gcccgaaccg cgtcccgic cccggcccg tctgggagcg cctgcccgg cccggcccg  gggacccgt tctgcagcc gcccggggc gttgcgctct ggtctgctggc ctacggcgcc gttggggccg tggcggtgt  cggcaacctc gttgtgact ggaatggtct ggccacacag cgtalggga cgttaccacaa cttctctc ttgaaactgg  ccttcggga cggcccalg gcccggctca acggcgctgt caacttalc taccgctgc acgggagagtg gtaactggc  gccaactact gcccgttcca gaactctc cccatcacg cgtgttcgc cagcatctac tccatgacgg ccatcgcggt  ggacagatcac atggccatt ttgacccct gaagccacgg cgtctgcca cggccacccc gattgcatc ggaagcatct  ggatttggc atttactt gatttctc agttgtctga ttccaaatc aaatgcalc caggccggctac tctttctac gttcagtggc  cagaaggttc aaggcaacat ttacgtacc acatgactc calcgctc gttgtact ttctttgt calcatgggc atcaactca  ccatagtgg aatcacgctc tggggagggg agatccagg agacacctgc gacaaatgacc agggagcagct gaaaggccaag  cggaaagggtg taaaatgat gattcagt gttgtgact ttggcatctg ctggctggcc taccatct acttactt caccggcatc  tatcagcagc tgaacagggtg gaaatcacat caggcaggct acctggccag ctctggctg gccaatgact cgaaccatgta  caaccocalc atctactgt gttgataa gattttgt gttggctca agagggctt ccgctgggtc cttttatcc agcttccag  ctacgacgag ctggagctca aagccacag gttccaccca atggcgaaga gcaagctata cacagtgaca agaatggagt  ccatggagct gttatcgac tccacagtg ggagacagtg caggctcagt caccagaaaga gaggagacgac caggagacga </p>	A	Homo sapiens

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545	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	<p>ttaaatataat taaaaatcat atgaaaaat</p> <p>MASPAAGNL SA WPGWGWP PPA ALRNL TSSPA PTASPSAPS WTPSPRPGPA</p> <p>HPFLQPPWAV ALWSLAYGAV VAVAVLGNLV VIWIVLAHKK MRTVTNSFLV</p> <p>NLAFADAAMA ALNALVNFY ALHGEWYFGA NYCRFQNFPP ITAVFASIYS</p> <p>MTAIAVD RYM AIIDPLK PRL SATATRIVIG SIWILAFLLA FPQCLYSKIK</p> <p>VMPGRITLCYV QWPEGSRQHF TYHMIIVIVLV YCFPLLMGI TYTIVGFTLW</p> <p>GGEIPGDTCD KYQEQLKAKR KVKKMMIIVV VTFALCWLPY HIYFILTAIY</p> <p>QQLNRWKYIQ QVYLASFVLA MSSTMYPNII YCCLNKRFR GFKRAFRWCP</p> <p>FIHVSSYDEL ELKATRLHPM RQSSLYTVTR MESMSVVVDS NDGDSARSSH</p> <p>QKRGTRDVG SNVCSRRNSK STSTTASFVS SSHMSVEEGS</p>	P	Homo sapiens
546	177168	CysteinyI Leukotriene CYSLT1 Receptor	NM_006639	<p>atggatgaaa caggaaatct gacagtatct tctgocacat gccatgacac tattgatgac ttcggcaac aagtgatc cactgtgac</p> <p>tatatgatct ctgtgtagg ctctttggc aatggctttg tgcctatgt cctataaaa acctatcaca agaatgcagc ctccaagta</p> <p>tacatgata attagcagt agcagatccta ctgtgtgtgt gcacacigcc tctccgtgtg gctatgatg ttcacaaagg catgtggcic</p> <p>ttgtgtgact tctgtgccc cctcagcacc tatgtttgt atgcaacct ctatgttagc atctcttta tgcacagccat gtagcttttc</p> <p>cggtgcatgt caattgttt tccagtccag aacattaatt tgggtacaca gaaaaaagcc aggtttgtgt ggttaggtat tggatntt</p> <p>gtgatitga ccagtctcc atttcaatg gccaaaccac aaaaagatga gaaaaataat accaagtgct ttgagcccc</p> <p>acaagacaat caaactaaaa atcatgtttt ggtcttgcat tatgtgtcat tgtttgttg cttaataic ccttttgta ttaataigt</p> <p>ctgttacaca atgatcatit tgcacttact aaaaaatca atgaaaaaaa atctgtcaag tcaataaaag gctataggaa tgaatcaggt</p> <p>cgtgacccgt gcccttttag tcatgttcat atccaactga ccatlccact tcaatttta caaatgaaa ctcaacctgt</p> <p>tgaatctgt ctaagaatgc agaatgocgt ggtcalaacc ttgtctctgg ctgatccaa ttgtgtctt gacctctctc tatattct</p> <p>ttctgggggt aactttagga aaaggctgtc tacatcaga aagcattcti tgcacagct gactatgta cccagaaaga aggcctctt</p> <p>gccagaaaaa ggaagaagaa tatgaagaat atag</p> <p>MDETGNLTVS SATCHDTIDD FRNQVYSTLY SMISVVGFFG NGFVL YVLIK</p> <p>TYHKKSAFQV YMINLA VADL LCVCTLPLRV VYYVHKGIWL FGDFLCRLST</p> <p>YALYVNL YCS IFFMTAMSF RCIATVFPVQ NINL VTQKKA RFVCVGIWIF</p> <p>VILTSSPFLM AKPQDEKNN TKCFEPQDN QTKNHVLVLH YVSLFVGFI PFVIIVCYT</p> <p>MIILTLKKK MKKNLSHKK AIGMIMVVT AFLVSFMPYH IQRTHLHFL</p> <p>HNETKPCDSV LRMQKSVVIT LSLAASNCCF DPLL YFFSGG NFRKRLSTFR</p> <p>KHLSSTVTVV PRKKASLPEK GEEICKV</p>	A	Homo sapiens
547	177168	CysteinyI Leukotriene CYSLT1 Receptor	NP_006630.1	<p>ccacggctcc gccggctgca cggctgcacc ggcagcggct caggctccgg ctctctccc gctgcagcag ccgcgctgcc</p> <p>ggccccactg ggctcggatc cggccccggc cccctcggca ccgctcgtc tggccccggc ccggcccccc cggaccatlg</p> <p>gctggggggc cccaggggaa acccgaccgg gccaaaggcc cgcacaagag aggtctccgg gccggggccc ctcccggccc</p> <p>cccagctc ggccccggcc ctgccccggc tcccggagcc gctgagact ggcggggccat ggagcgcgcg ccggccgacg</p> <p>ggccgctgaa cgtctcgggg gcgctggcgg gcgagcggc ggccggcggc gggtggcggc gctctcggc agcctggacc</p> <p>gggggtcgtg ccggcctat ggccctcctc atcgtggcca cgggtcgtgg caacggcgtg gtaicgtcg ccttcgtggc</p> <p>cgtactggag cctccgaccc agaaacti ctctcgtc aactcgcca tctcgacti cctcgtcggc gcctctgca</p> <p>tcccactgta tgaacctac gttctgacag gccgtcgac ctccggccgg ggccctcgtga agctgtggct ggtatggac</p> <p>taactgtgt gacctctc tgcctaac atcgtgtccta tcaactaga ccgtctctg tgggtacccc gagcggctc</p> <p>ataccggggc cagcagggtg acacggcggc ggcaatgcgt tgggtgggt tgggtgggt gctggcctc ctgctgtacg</p> <p>ggaccagcat cctgagctgg gagiactgt ccggggggcag ctccatccc ggaggggcact gctatggcca gtctctac</p>	P	Homo sapiens
548	177191	Histamine H3 Receptor	NM_007232	<p>ccacggctcc gccggctgca cggctgcacc ggcagcggct caggctccgg ctctctccc gctgcagcag ccgcgctgcc</p> <p>ggccccactg ggctcggatc cggccccggc cccctcggca ccgctcgtc tggccccggc ccggcccccc cggaccatlg</p> <p>gctggggggc cccaggggaa acccgaccgg gccaaaggcc cgcacaagag aggtctccgg gccggggccc ctcccggccc</p> <p>cccagctc ggccccggcc ctgccccggc tcccggagcc gctgagact ggcggggccat ggagcgcgcg ccggccgacg</p> <p>ggccgctgaa cgtctcgggg gcgctggcgg gcgagcggc ggccggcggc gggtggcggc gctctcggc agcctggacc</p> <p>gggggtcgtg ccggcctat ggccctcctc atcgtggcca cgggtcgtgg caacggcgtg gtaicgtcg ccttcgtggc</p> <p>cgtactggag cctccgaccc agaaacti ctctcgtc aactcgcca tctcgacti cctcgtcggc gcctctgca</p> <p>tcccactgta tgaacctac gttctgacag gccgtcgac ctccggccgg ggccctcgtga agctgtggct ggtatggac</p> <p>taactgtgt gacctctc tgcctaac atcgtgtccta tcaactaga ccgtctctg tgggtacccc gagcggctc</p> <p>ataccggggc cagcagggtg acacggcggc ggcaatgcgt tgggtgggt tgggtgggt gctggcctc ctgctgtacg</p> <p>ggaccagcat cctgagctgg gagiactgt ccggggggcag ctccatccc ggaggggcact gctatggcca gtctctac</p>	A	Homo sapiens

549	177191	Histamine H3 Receptor	NP_009163.1	<p> aactggtact tctatcaac ggtcttcaac ctggaggttct ttacgocctt cctcagcgtc accttcttta acctcagcat ctactgaaac  atccagagggc gcaacccgctt ccggcttggat gggggctcggag agggcagccggc ccccgagccccc cctcccgagggc cccagccctc  accaaccccca ccgctcggct gctggggctcgt ctggcagaaag gggggcagccggg agggccatggcc gctgcacaggg ttatggggggg  gttggggggc cgtaggcggct gtagggcggg agggccaccc cggggggggg gggggggggg gctocggggc ttacacacac  tccagctccg gcaagctcctt gtagggggcact gtagggggcggc gctactcaa gaggggggctcc aagcccgctggc cgtctcggc  ctgggggag aagccgcatga agatgggttc ccaagggctc acccagggct acccagggct tgggggttc tgggggagggc aagggggcca  agctcgggc cgtcagctgg agcatctgg ggtctcgtcgg gggccacatg agggccacatg tgaatccgg gggccggctgg  catggcact ggtccctga ctactgggtac gaaacccct tggggctctt gggggccaac tggggctgtca accctgtct  ctacccctgg tggacacaca gcttccggcg gggccctcac aagctgtctt gggccacagaa gctcaaaatc cagccacaca  gctccctggg gcaatgtctgg aagggagggg ccaacagag cctccctcag ccacggctct ctacggccag gctctcggg  catctggccc tggggccccc taccggctc gttcccccag gggggggggc cggcggtgt gggggccctct cttaagcca  cggcagccac ccggccatgg agggccctc ctggggggc cagagggggc ctacatggct gggagggggc ctggggggg  ggggctggcc cccatctt ggtccaccc ggggggggag gctcggggg cccagagatg cggccacac ccggctggg  ccacccctc gagggtact gttgggttc ttcccaagc aagccatgg gttggctcca ggtctcggc cctagcagtt tggctcggc  cgtgcacaca cctgcacac cctgcacac gttccctcc cggggagag cccagggcact gcttggctg  cctctgtct ctggcagaag cctcagggct gggcccttca ccccttcc caccactt ctctggcccc aaaaagttca agggggccctta  ggaaacctga agctgtctc tgggttcca tttgggggt ttccagaaag atgaaagaaag aaacatgtct gttgaaatga tttcggggg  atgttaatc aagagagaca aaatgtga gggagtcagg gctgggtggc cagggtgggg cttccacggc cttccctc  cgtaaaggt tccggctgg cgtggcagc tggcttggc caccggct cttggggctac accagccctg gttggccaagc  ctggccggc cactctgtt gctacacag gacccctggg gttggggg agggagggggc ccggctgggg ccggagggctc  caaggcggc agggggggc cagagggaggt gcccggggcagg gggccggctc gcatggct gggccggct gggccggct  ctggctgtc ctggctgt gggccgtggc ctggccgtga aaccgtggg tcaataaaa gttgatttt taaaaaaa  aaaaaaaaa aaaaaaa </p>	P	Homo sapiens
550	177387	G Protein- Coupled Receptor ORF4	NM_020155	<p> LYPLCHHSFR RAFTKLLCPQ KKKIOPHSSL EHCWK  agggccgtt gggccacac gagggtatc aggggtctt cccctccac cccagagaga catgaagac cggagccagg  gagttctc ctggggctc tgcacccc catctggc tctggggtag gcccaggggag gaggacacccc caacccat  ccggctgtc ctggggaana gaggatggcc ttccatggc ctggggtag gggctggggc cagggtctgt gtttccca  agggcaagg tctctgtt gaggaggggg gctcggcagc caaacctt tttctctga gggccacatc tccctctg  caccctgcaa ttccacccc ttccattta ttccctgggt cccggcagaca gttccctt gttctctcc gggatcagg cctccctcc  tgacatggag agtaacctt ctggccgtt gggctcggc cggggggggc ctggctggc accctggg accctgggg  tgacagctc ctacacacc ctgtatggc tctctt ctccgtat gggccatg gggggggg tctgtatgg cacaagggc  tcagctatca gagggtgtc ctggccctt gttctgtc gggccggctg cgtacacac tttctctt ctactccga gtaactccc </p>	A	Homo sapiens

551	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	P	Homo sapiens	<p>ggccaacgg cctggggccc ttgccctctt ggcttctcta ctgctgcccc gctgcctcgc agttctcac ctgacgctt atgaacctt actttgcca ggtgtgttc aaggccaagg tgaagcgcgc ggcggagatg agccaggct tgcctgcctt cggagggcc tttgggggg cctgcctctt ctttctctg gtgaacgtgc tctgtctctt gctctccat cggcgcgac agccctgggc cctgtctt gtcggctcc tggtagcga ctcctgttc gtaactcgc cgtctctt tgcctgcctc ctgctcgc tggccagcgg ggccctcca ctgaccta cctggaggcc aaggtagggc tgcagcactg atgcccagggt gcttttggg tctctggca gggttcca ggtgttag MESNLSGLVP AAGLVPALPP AVTLGLTAA YTTYALLFFS VYAQLWLVL YGHKRLSYQT VFLALCLLWA ALRTTLFSFY FRDTPRANRL GPLPFWLLYC CPVCLQFFTL TLMNL YFAQV VFKAKVKRRP EMRSGLLA VR GAFVGASLLF LLVNVLC AVL SHRRAQPWAL LLVRVLVSDS LFVICALSLA ACICLVASGR PPLASTWRPR</p>
552	180956	Lysophosphatidic Acid Receptor Edg7	NM_012152	A	Homo sapiens	<p>cttcttaaa ttcttcta ggaigtctac ttcttcca caatgaatga ggtcactat gacaagcaca tggactttt ttaatatgg agcaacactg atactgtcga tgaactggca ggaacaaagc ttgtgtgt ttgtgtgt gggacgttt tctgcctgt tatttttt tctaatttc tggtaicgc ggcagtgatc aanaacagaa aaattcatt ccccttctac taccgttgg ctaatttag tctgcctgat ttcttcctg gaattgcta tgaattcctg algttaaca caggccacgt ttcaaaaact tgaacttga accgtctgtt tctccgicag gggttcttgg acagttagctt gactgttcc ctaccaact tgcctgttat cgcctgtggag aggcacatgt caatcagag gagcgggtc calagcaacc tgaacaaaa gaggtgtgaca ctgtcatt ttgtgtctg ggccatcggc attttatgg ggcggtgtcc cacactgggc tggaaatggc tctgcaact ctgctcgc tctccctgg ccccatia cagcaggagt taccgttt tctggacagt gtccaactc atggcttcc tcatcaggt tgtgtgtgac ctgggact acgtgtact cagagagaa accaacgtct tctctcgcga tacaatggg tcatcagcc ggcggagagc accaagaag ctaatgaaga cgtgtgtgac tctcttaggg gctgtgtgg tatgtgtgac cccgggctc gttgtctgc tctgcaggg cctgaactgc aggcagtgctg gcgtcagca tgtgaagaag tgtgtcgc tgcctgcct gctcaactc gctgtgaacc ccatcatcta ctctacaag gacagagaca tgaatggcac calgaagaag atgaatctgt gcttctca ggaagaacca gagaaggctc cctctgcac ccctccaca gtcctcagca ggaatgacag aggcagccag tacaatggg atagttag ccaagggtgca gctgtcaata aaagcactc ctactcgc gctgtctc ggccaccca ggtgtgact gcttagg MNECHYDKHM DFFYNRSNTD TVDDWTGTLKLVIVLCVGTFF CLFIFFSNL VIAA VIKNRK FHFPFYLLA NLAAADFFAG IAYVFLMFT GPVSKTLTVN RWFLRQGLD SSLTASLTNL L VIAVERHMS IMRMVHSNL TKRVTLLIL LVWAIAIFMG AVPTLGWNCL CNISACSSLA PIYSRSLV VFWTVSNLMAFL IMVVVYLRV VYVVRKKTNVL SPHTSGSISR RRTPMKLMKT VMTVLGAFV CWTPGLVLL LDGLNCRQG VQHVWRWFL LALLNSVVP IYSYKDEDM YGTMMKMICC FSQENPERRP SRPSTVLSR SDTGSQYIED SISQGAVCNK STS atggggcccc gcagggcgt cgtggcgggt cttctgtga tggactcgc cgtggcgtc ctatccaacg cactgtgt gtctgtgc gctacagcg ctgagctcgc cactcagcc tcaaggctc tctgtgtga tctgtctc ggccactgc tctgtgggc gctgtgacat ccttcacgc tgcctgtgt gtagcggggc cggacaactc cggcgcccg cgcagccaa gtcatgtgt tctgtgacac ctctgtgc locaagcgg cgtgtgagc ggtgtgagc aggcagacc agtggcgtgg agtgggttc coactgcgt acccgagacg cctgcagccg cgtatgcgc gctgtgtt gggctgtgtc tggggacagt cgtgtgctt ctacggcgt gactgtgt gctgtgtgt tggctacagc agcgcctcgc cgtctgtc gctgtgtc ccggccgagc ctgagctcc gcgtctcga gcttccacg coactcga tgcgtgggc ttggtgtcgc cgtgtgtcgt gctctgcctc acctgtcc aggtgtcaccg ggtgtgacgc agacactgc agcgtatgga caocgtcaac atgaaggcg</p>
553	180956	Lysophosphatidic Acid Receptor Edg7	NP_036284.1	P	Homo sapiens	
554	189873	G Protein-Coupled Receptor GPR78	AF411107	A	Homo sapiens	

555	189873	G Protein- Coupled Receptor GPR78	CAC3404.1.1		<p> tgcgcgtgct cgcgcacctg cacccacagtg tgcggcacgg ctgcctcalt cagcagaagc ggccgcgccca cgcgcgccacc  aggaaagattg gcatigtctat tgcgaccttc ctatctgct tgcgcccgta tgcaltgacc aggcctggcgg agctcgtggcc  cttcgtcacc gtagacgcc agtgggggcat cctcagaag tgcctgaact acagaaggc ggtggccgac ccgttcacgt  actcttgct ccgcggccg ttcgcgaag tccggccgg calgtgac cggctgctga agagaacccc gcgccacga  taccacatg acagctctt ggaatggcc ggcaatgggc accagctgct gaagagaacc ccgcgccacg cgtccacca  caacgctct gggaacacag agaagatc ctgcctgac cagacacat ga  MGPGEALLAG LLVMVLAVAL LSNALVLLCC AYSaelRTRA SGVLLVNLSL  GHLLAALDM PFTLLGVMRG RTPSAPGACQ VIGFLDTFLA SNAALSVAAL  SADQWLA VGF PLRYAGRLRP RYAGLLGCA WQSLAFSGA ALGCSWLGYG  SAFASCSLRL PPEPERPFA AFTATLHVG FVLPLAVLCL TSLQVHRVAR  RHCQRMDT VT MKALALLADL HPSVRQRLI QKRRRRHRAT RKIGIAIATF  LICFAPYVMT RLAEVPFVT VNAQWGILSK CLTYSKAVAD PFTYSLLRP  FRQVLAGMVH RLLKRTPRPA STHDSSLDVA GMVHQLLKRT PRPASTHNGS  VDTENDSCLQ QTH </p>	P	Homo sapiens
556	189874	Neuromedin U Receptor 2	NM_020167		<p> aiggaaaaac ttcaagaagc ttctggatc taccagcaga aactagaaga tccaltccag aaacacctga acagcacga  ggagatctg gccttctct gcggacctg gcgcagccac ttcttctcc ccgigtctg gggtatgig ccaatttgg tggggggg  cattggcaat gttctgggtg gcctgggat tctgcagcac caggctatga agacgccac caactactac ctctcagcc  tggcggtctc tgaacctccg gttctgtcc ttggaatgcc ccgggaggic taigatggt ggccgaacta cctttctg  ttggggcccg tgggtgcta ctcaagacg gcctcttg agaccgtgtg ctgcctcc atctcagca tcaccacgt  cagcgtggag cgtacgtgg ccatctaca ccggtccg gccaaacgc agagcacccg gcgcggggcc ctacggatoc  tcggcatctg ctggggcttc tccgtgctct tctctccg caacacagc atccatggca tcaagtcca ctacttccc  aatgggtccc tgggtccagg ttgcgcacc tgaaggta tcaagccat gtaggtatc aatttcat tccaggtcac ctcttcta  tttacctcc tcccatgac tgcatact gttcttact acctatggc actcagac aagaagaca aatctctga ggcaatgaa  gggaatgcaa atataaag accctgaga aaatcagca acaagatgct gttgtctg gttatgct tggggcccg  ttccatg accgactct ctacgtcti gttggaggat ggagatgaat ccgtgcgtg gtttcaac tgggtcaggt gggtcaggt  gtcttctct acctgagctc agctgtcaac ccatatct ataacctat gttcgcgcg ttccagcag caltccagaa tggatctct  tttttccaa aacagtggca ctccagcat gaacacag tgcacctg ccaggggaac atcttctga cagaatgcca  ctttggag ctgaccgaag atataggtcc ccaattcca tgcagtcac ccatgcacaa ctctcactc ccaacagccc  tctctatga acagtga agaacaact atcaagcti ccaattaac aaacctga  MEKLQNASWI YQKLEDPFQ KHLNSTEYL AFLCGPRRSH FFLPVSVVYV  PIFVVGVI GN VLVCLVILQH QAMKTPNTY LFSLA VSDLL VLLGMPLV  YEMWRNYPFL FGPVGCYFKT ALFETVCFAS LSITT VSV ERYVAILHPFR  AKLQSTRRA LRLGIVWGF SVL FSLPNTS IHGKIFHYFP NGSLVPGSAT  CTVIKPMWY NFIIQVTSFL FYLLPMTVS VLYLMALRL KDKSLEADE  GNANIQRPCR KSVNKMFLVL VLVFAICWAP FHIDRLFFSF VEEWSES LA  VFNLVHVVS G VFFYLSSAVN PIYNLLSRR FQAAFNVIS SFHKQWHSQH  DPQLPPAQRN IFLTECHFVE LTEDIGPQFP CQSSMHNHSL PTALSSEQMS  RTNYQSFHFN KT </p>	A	Homo sapiens
557	189874	Neuromedin U Receptor 2	NP_064552.1		<p> aigtggcag ctgccttgc agacttaac tccagcagca tgaatgic ctigtctac ctccacttg ccggaggga cctgcccct  galtccagg actggagaac catcatccg gctctctgg tggcgtctg ccgtggggc ttctgggaa acctgtgtg </p>	P	Homo sapiens
558	189884	G Protein- Coupled Receptor	LG94108		<p> aigtggcag ctgccttgc agacttaac tccagcagca tgaatgic ctigtctac ctccacttg ccggaggga cctgcccct  galtccagg actggagaac catcatccg gctctctgg tggcgtctg ccgtggggc ttctgggaa acctgtgtg </p>	A	Homo sapiens

Ls189884

559 189884 G Protein- ENSMPRT1140 P Homo  
Coupled Receptor 67 sapiens  
Ls189884

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tgaataatg

560 189895 G Protein- NM\_031936 A Homo  
Coupled Receptor GPR61 sapiens

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561 189895 G Protein- NP\_114142.1 P Homo  
MESSPIPQSS GNSSTLGRVP QTPGPSTASG VPEVGLRDVA SESVALFFML

Coupled Receptor GPR61	sapiens				LLDLTAVAGN AAVMAVIKTPALRKFFVVFHLCVLDLLAA LTLMLPLAMLS SPALFDHALFGEVACRLYLF LSVCFVSLAI LSVSAINVER YYYVVHPMRY EVRMTLGLVA SVLVGVVWKA LAMASVPVLG RVSWEEGAPS VPPHCSLQWS HSAYCQLFVV VFAVLYFLLP LLLILLVYCS MFRVARVAAM PDGPLPTWME TPRQRSELS SRSTMVTSSG APQTPHRTF GGGKAAVLL AVGGQFLLCW LPYFSFHLVY ALSAQPISTG QVESVVTWIG YFCFTSNPFF YGCLNRQIRG ELSKQFVCFK KPAPEEELRL PSREGSIEEN FLQLQGTGTC PSESWVSRPL PSPKQEPNAV DFRIQAR																													
562	189900	Sphingolipid Receptor Edg8	NM_030760																															
563	189900	Sphingolipid Receptor Edg8	NP_110387.1																															
564	189901	G Protein- Coupled Receptor Ls189901 (HEOADS4)	LG94029																															



565	189901	G Protein- Coupled Receptor Ls189901 (HEOAD54)	CAC38933.1	<p>ggccaccgg gcagctgccc ccacgggaagc acggctcagc acgfggggg gcggcaccac ctacagtag cgggttagig cgtatgctgt gagggaagaca acgctggccg tgcgggtggg ggcacagcag aagagggtga ctgtgcagc agcagcccca aagccagg tctatggga gaggtagtag tccacggga gggcgaggt gctgatcagg aggaagtcag cggccaocag gctgaccagg aacaccgtgt tggaggtcca gggccggcg tggatcaga agatgaagag ggcacaacig ttcccacca ggccaggac aaatccagg gccaggatig ggcaggaa ggcagacc agcgaggag agtggggg gcaaggccct ccaggagcc cccacaggt ggaaagg</p> <p>MELHNLSPS PLSSSVLPP SFSPSPSSAP SAFTTVGGSS GPCHPTSS LVSAFLAPIL P Homo sapiens</p> <p>ALEFVLGLVG NSLALFICI HTRPWTSTNV FLVSLVAADF LLISNLPLRV</p> <p>DYLLHETWR FGAAACKVNL FMLSTNRTAS VVFLTAIALN RYLKVVQPHH</p> <p>VLRSASVGA ARVAGGLWVG ILLNGHLL STFGSPSCLS YRVGTPKSAS</p> <p>LRWHQALYLL EFFPLALIL FAIVSIGLTI RNRGLGQAG PQRAMRVLAM</p> <p>VAVYTICFL PSIIFGMASM VAFWLSACRS LDLCITQLFHG SLAFTYLSNV</p> <p>LDPVLYCFSS PNFLHQSRAL LGLTRGRQGP VSESSYQPS RQWRYREASR</p> <p>KAEIGKLV QGEVSLEKEG SSQ</p>
566	189904	Purinergic Receptor P2U2 (GPR91)	NM_033050	<p>ggtatggt taactcagca gaattgtg aacaactac acatgctggg gatcaggca tggaaigcaa ctgcaaaaa A Homo sapiens</p> <p>cggctggca gcagaggctg ccciggaaaa giataacti tccattiti algggatiga gttcgtgtg gtagctctg gaaataccat</p> <p>tgtgtttac ggctacat tctctgaa gaaciggaac agcagaaata ttaactit taacctct gttctgact tagtttct</p> <p>gtgcaacct ccatgtga taaggatga tgcacatga aatggatga atggagaggt gctgtgcala agcaacggat</p> <p>atgtgtcca tgcacacct taaccagca tctcttct cactttatc agcatagatc gatactgat aataagiat ctttccgag</p> <p>aaacactct gcaaaagaaa gatttgcta tttatctc ctggccat ctgggttag taacctaga gtiataccc atactccc</p> <p>ttataatcc tttatzaat gacaaigga ccaactgtaa tgaattgca agttctggag acccaacta caacctat tacacatgt</p> <p>gttaacact gttgggtc ctatctc ttgtgtat gtgttctt tattacaaga ttgtctcti ctaaaagcag aggaataggc</p> <p>aggtgtctac tgcctgccc ctgaaagc ctctcaacti ggtatcaltg gcagtggaia tctctctgt gcttttaca cctatcacg</p> <p>tcatcggaia tggagatc gctcacgcc tggggagtg gaaagcagiat cagtgccatc aggtgctat caactctt</p> <p>tacatgta cagggctt ggctttctg aacagtgta tcaacctgt ctctatit cttingggag atcactcag ggcacatgctg</p> <p>atgaaatcac tgaagacaaa ctcaaatcc cttaactct ttacagatg ggctcatgaa ctctacti catcagaga aagtgaggg</p> <p>gcttgtgaaa cagattgtc tacagatga tctgaagcc agttacagt tgccttaact catagacatc aatcagagag tgcacagat</p> <p>ttacactga tcaaaagca agttgaccc agagtatgt aaaaagatgg gacgacaaga atgtactgt tttctct aagaatigaa</p> <p>aggagtga cgtctatg ttggcaltg taactcaaaa atactaggia giataaggct tttcaatca gtgcaaaaal ggaagatata</p> <p>taaaagcaac agttgtctgc attgatcac tggtagatt gtaaaaaa aaaaaaaa</p> <p>MAWNAATCKNW LAEEAALEKY YLSIFYGIEF VVGVLGNTIV VYGYFSLKN P Homo sapiens</p> <p>WNSSNYLFLN LVSDFLFLC TPLMLIRSYA NGNWYGDVL CISNRYVLHA</p> <p>NLYTSILFT FISIDRYLI KYPREHLLQ KKEFALLISL AIWVLVLEL LPILPLINPV</p> <p>ITDNGTTCND FASSGDPNIN LIYSMCLTLL GFLPLFVMC FFYKIALFL</p> <p>KQRNRQVATA LPLEKPLNLV IMAVVIFS VLFTPYHVMNV RIASRLGSKW</p> <p>QYQCTQVNVN SFYIVTRPLA FLNSVINPV VF YFLLDGDFRD MLMNQLRHNF</p> <p>KSLTSFSRWA HELLSFREK</p>
568	189920	G Protein- Coupled Receptor GPR63 (PSP24)	NM_030784	<p>tggagcatg cctctggcg tcttcggcg ggcggcgcg gctggccttc gcttaggca aaaggactct tgtggaagt A Homo sapiens</p> <p>ggaaactat gtcaatttc cagaatgat tccaagccc atcaatggga cctgatactg ctgtctgtg ttgaaagct tgaagaactc</p> <p>cgtcatctct gcttgcatct tcaatctac tgaacacatg gtctctcgg cagtggtgac tgcgttccat accgggacat ccaacacaac</p>

beta)

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agactttt ttictgaa gacatgctg cttttacat cacatggag cc  
MVFSAVLTAF HTGTSNTTFV VYENTYMNIT LPPFQHPDL SPLLYSFET P Homo sapiens  
MAPTGLSSLT VNSTAVPTIP AAFKSLNLPL QITLSAIMIF ILFVSFLGNL  
VVCLMVYQKA AMRSAINLL ASLAFADMLL AVLNMPPALV TILTRWTFG  
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FPLAVGNPDL QIPRAPQCV FGYTTNPGYQ AYVLISLIS FPIFLVILY SFGILNLT  
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P Homo sapiens

A Homo sapiens

NP\_110411.1

G Protein-Coupled Receptor  
GPR63 (PSP24  
beta)

189920

569

AK027843

G Protein-Coupled Receptor  
Dj287g14.2

189945

570

571	189945	G Protein-Coupled Receptor Dj287g14.2	BAB55406	<p>gcttgggtatt ttgagatcat gttttttctg aacattgccca tgttcatgtt ggtatagtggt cagatctctgtg ggtagggaatgg caagaagaagc aaccggaccoc tgaagaagaaga agtgaagaag aacctggcca gttgtgttag ctgaccttt ctgttgggcca tgcattggggg ttttgcatc ttgctctggg gaccttaaa latcccttc atgtacctt tctccatt caatcaltta caaggcttat ttatattcat cttccattgt gctatgaagg agaatgttca gaaacagtgg cggcgccatc tctgtctgg tagatttcgg tttagcagata actcagattg gtagtaagaca gctaccaata tcatcaagaa aagtcttgat aattcttgat aacttttgc ttcaagctcc atttggttcca actcaacctt tcttaccatc caatctaacat ccagctctac cacttttgc aanaaggaata gcaacacaga taalgctctc taalgagcatt ccttcaacaa aagtggatca ctacagacagt gcttccatgg acaagctctt gctcaaacgt gccaacgtg gccaatctg atggagatca aacatcaatc atccctgtcc atcagggtcc tgaatagggtc aagggttatt gcaatgctca ttgagacaac ttctataaa atattatcat gtcagacacc ttacgccaca gcaacaagt ttatgtctt taaggaagaag aatcaatct gcaagaatgt gaaagtattgc aagcagtgta aactgcaact agtgaatga aigtgtatt acctaggtaa ctgcalatat alaaaggaa gtttttgta agaaagcttt tgtgaatc agaatttt tttaatat atttttcca tggaaagagt gtcactaca aacttcat actgagagta acatgactca gtagccacag aagctatgat ttgtaaaata tataatgaa tcaagagtaat cataatgagc gggagagacatt caaattagag acaaggaga agcaatgctg aggaagaccoc tagatagagc tcaatttact ccaactaat gttatattc gataatocca ttcttgcac cttttctc aacaataaac tgtctgtct ttggaagatt taagacatt octaagcac aataaaagc ctcgtattc cccattgaga gttttgtcc aagggaatag aagtgaagaca tatgggtgag tcaataat caaataat tatgaagagc tgggtctgca atagctatg taaaactac ttgtgtgca gtctctgtg tatatatat aagagcttgg ggaagcttgg caagatagat ggtgtattat ttatggatca ggtctctgca tacaacctt gcatattat atgagctta octaacctc agctattct ggaatagct tgcgtctaa tgaatgata ggaagaccaca ttgaattgt tctataga tggagttcat gcaagttctt agaaatgctt ctgagtgctt ttacattg cttctgggta tctgggaagt atcagttctt gggagggcaac agcatuaagt gataagaata ggaagcattc tggcaagcc aatctgctta aaggcaagt ccaagaacctg gaaactagag gctttctt ctgacagaaa aacagggtagt ttgcaagctg agatattggga gagctttag gctacacagc aacccaaggc acctcacc ttgtctgag cttaatcag gaagctatt gcttggctcc agcagatgat gagaataga ggtatgggt ttittattc tgttccatt tgcacatcc tgcacaacca tcttgggaga caagcatt acctagctg gctttacgg gggaggggtg taitcagt</p> <p>MDFESGQVDP LASVILPPNL LENLSPEDSV LVRRAQFTFF NKTGLFQDVG PQRKTLVSYV MACSIGNITI QNLKDPVQIK IKHRTQEVH HPICAFWDLN KNKSFGGWNT SGCVAHRDSD ASETVCLCNH FTHFGVLM DL PRSASQLDAR NTKVLTFISY IGCGISAFS AATLLTYVAF EKLRDYP SK ILMNLSTALL FLNLLFLLDG WITSFNVDGL CIAVAVLLHF FLAFTFTWMG LEAHMYIAL VKVFNTYIRR YILKFCIIGW GLPALVSVV LASRNNNEVY GKESYGKEKG DEFCWQDPV IFYVTCAGYF GVMFFLNIA M FIVVMVQICG RNGKRSNRTL REEVLRNLRS VVSLTFL LGM TWGFAFFAWG PLNIPFMYLF SIFNSLQGLF IFIFHCAMKE NVQKQWRRHL CCGRFR LADN SDWSKATNI IKKSSDNLGK SLSSSSIGSN STYLTSSKSKS SSTTYFKRNS HTDNVSVEHS FNKSGSLRQC FHQVVLKTK PC caccattagg caaagatgt ttctttag agaatcagc ctgtaata caggttacc aggcagatg gagaatac agattttcga tacttatt atgcagtgac atacactg atcttctg caggttcat aggggaataa ttgacctgt gggatttca tgggtatag aagaagaaca aacgagctgt gatatitag ataaactag ccattgtga ctactaca gtttcttct tggcactgag gactttac tactgaatc atgacaggoc atttggoc tggctctgca tgtctgtt ctactgaag tatgtcaaca tgtatgcaag calctactt ttgtctgca tcaagtgtgg acgatttgg ttctcatgt acccttgg ctctatgac tgcacaaga aatatgacct gtacatcagc attgctggct ggcgtatcat ctgcttggc ttgttactt ttccactct cagaaccagt gatgatact ctggcaatag gaccaaatgc ttgtggatc ttctaccag gnatgtcaac ctggccocagt ccgttgtat gatgacatt ggcgagtga ttgggttgt</p>	P	Homo sapiens
572	190026	G Protein-Coupled Receptor JEG18	NM_032553	<p>gcttgggtatt ttgagatcat gttttttctg aacattgccca tgttcatgtt ggtatagtggt cagatctctgtg ggtagggaatgg caagaagaagc aaccggaccoc tgaagaagaaga agtgaagaag aacctggcca gttgtgttag ctgaccttt ctgttgggcca tgcattggggg ttttgcatc ttgctctggg gaccttaaa latcccttc atgtacctt tctccatt caatcaltta caaggcttat ttatattcat cttccattgt gctatgaagg agaatgttca gaaacagtgg cggcgccatc tctgtctgg tagatttcgg tttagcagata actcagattg gtagtaagaca gctaccaata tcatcaagaa aagtcttgat aattcttgat aacttttgc ttcaagctcc atttggttcca actcaacctt tcttaccatc caatctaacat ccagctctac cacttttgc aanaaggaata gcaacacaga taalgctctc taalgagcatt ccttcaacaa aagtggatca ctacagacagt gcttccatgg acaagctctt gctcaaacgt gccaacgtg gccaatctg atggagatca aacatcaatc atccctgtcc atcagggtcc tgaatagggtc aagggttatt gcaatgctca ttgagacaac ttctataaa atattatcat gtcagacacc ttacgccaca gcaacaagt ttatgtctt taaggaagaag aatcaatct gcaagaatgt gaaagtattgc aagcagtgta aactgcaact agtgaatga aigtgtatt acctaggtaa ctgcalatat alaaaggaa gtttttgta agaaagcttt tgtgaatc agaatttt tttaatat atttttcca tggaaagagt gtcactaca aacttcat actgagagta acatgactca gtagccacag aagctatgat ttgtaaaata tataatgaa tcaagagtaat cataatgagc gggagagacatt caaattagag acaaggaga agcaatgctg aggaagaccoc tagatagagc tcaatttact ccaactaat gttatattc gataatocca ttcttgcac cttttctc aacaataaac tgtctgtct ttggaagatt taagacatt octaagcac aataaaagc ctcgtattc cccattgaga gttttgtcc aagggaatag aagtgaagaca tatgggtgag tcaataat caaataat tatgaagagc tgggtctgca atagctatg taaaactac ttgtgtgca gtctctgtg tatatatat aagagcttgg ggaagcttgg caagatagat ggtgtattat ttatggatca ggtctctgca tacaacctt gcatattat atgagctta octaacctc agctattct ggaatagct tgcgtctaa tgaatgata ggaagaccaca ttgaattgt tctataga tggagttcat gcaagttctt agaaatgctt ctgagtgctt ttacattg cttctgggta tctgggaagt atcagttctt gggagggcaac agcatuaagt gataagaata ggaagcattc tggcaagcc aatctgctta aaggcaagt ccaagaacctg gaaactagag gctttctt ctgacagaaa aacagggtagt ttgcaagctg agatattggga gagctttag gctacacagc aacccaaggc acctcacc ttgtctgag cttaatcag gaagctatt gcttggctcc agcagatgat gagaataga ggtatgggt ttittattc tgttccatt tgcacatcc tgcacaacca tcttgggaga caagcatt acctagctg gctttacgg gggaggggtg taitcagt</p> <p>MDFESGQVDP LASVILPPNL LENLSPEDSV LVRRAQFTFF NKTGLFQDVG PQRKTLVSYV MACSIGNITI QNLKDPVQIK IKHRTQEVH HPICAFWDLN KNKSFGGWNT SGCVAHRDSD ASETVCLCNH FTHFGVLM DL PRSASQLDAR NTKVLTFISY IGCGISAFS AATLLTYVAF EKLRDYP SK ILMNLSTALL FLNLLFLLDG WITSFNVDGL CIAVAVLLHF FLAFTFTWMG LEAHMYIAL VKVFNTYIRR YILKFCIIGW GLPALVSVV LASRNNNEVY GKESYGKEKG DEFCWQDPV IFYVTCAGYF GVMFFLNIA M FIVVMVQICG RNGKRSNRTL REEVLRNLRS VVSLTFL LGM TWGFAFFAWG PLNIPFMYLF SIFNSLQGLF IFIFHCAMKE NVQKQWRRHL CCGRFR LADN SDWSKATNI IKKSSDNLGK SLSSSSIGSN STYLTSSKSKS SSTTYFKRNS HTDNVSVEHS FNKSGSLRQC FHQVVLKTK PC caccattagg caaagatgt ttctttag agaatcagc ctgtaata caggttacc aggcagatg gagaatac agattttcga tacttatt atgcagtgac atacactg atcttctg caggttcat aggggaataa ttgacctgt gggatttca tgggtatag aagaagaaca aacgagctgt gatatitag ataaactag ccattgtga ctactaca gtttcttct tggcactgag gactttac tactgaatc atgacaggoc atttggoc tggctctgca tgtctgtt ctactgaag tatgtcaaca tgtatgcaag calctactt ttgtctgca tcaagtgtgg acgatttgg ttctcatgt acccttgg ctctatgac tgcacaaga aatatgacct gtacatcagc attgctggct ggcgtatcat ctgcttggc ttgttactt ttccactct cagaaccagt gatgatact ctggcaatag gaccaaatgc ttgtggatc ttctaccag gnatgtcaac ctggccocagt ccgttgtat gatgacatt ggcgagtga ttgggttgt</p>	A	Homo sapiens

573	190026	G Protein- Coupled Receptor JEG18	NP_115942.1	P	Homo sapiens
574	190031	G Protein- Coupled Receptor VLGR1	AF055084	A	Homo sapiens

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575	190031	G Protein- Coupled Receptor VLGR1	AAD55586.1	<p>ggaggactac aatggccta cagacacttc tggatgtgg tctcttgtt catittcaac agtctgcagg gacttiagt ttcatgtt  tatitcatti tacacaacca aatgtgtgc cctatgaagg ccagttacac tgggaaatg aatgggcaic cttggaccag cacagccitt  ttcacgocg ggagtggat gcctctgtt ggaggggaaa tcagcaagc caccagaat ciatcggtg ctalggagga  ggtgccact gactggaga gagcatcct ccaacaggc agtcaggcca gcoctgatt aaagccaagt ccacaaatg  ggaccacgtt cccgtctct ggaggatag gccagggtc actgatagc gatgaggagt cccaggagt tgaatgata  aatgttcat taaaactgg tctgtctc agtgcagt ataatgaic tggcaaggc agccaggagg ggaggacact  gactgactcc cagatcgtgg agtcaggag gataccatc gccacact accctgtgcca cctcactaac catcgactg  agcacactt catatttga tcaactttg tctaaact cttatagac atccactgt gtaataggaa cctgtgaatt gtaactg  attaataca acgtgatgt tgaattgga gataaatta ctgatgtat gtaactgaa aattcactgc tataagaaag gtaggtcag  ttigtatcag ttaataggat gttcatatc caaggatatt agttgtttt ttaatcatcc tataatgcta acatgttta atgaaagtaa  taataataa agcaatagaa tct</p>	P	Homo sapiens
				<p>MQLCFCFCCC ILFYFDLYDF GRGYDFTIQE NGLQIDQPPE IGNISIVRII IMKNDNAEGI  IEFDPKTYTAF EVEEDVGLIM IPVVRLHGTY GYVTADFISQ SSSASPGGVD  YILHGSTVTF QHQQNLSFIN ISIDDNSE FEEPIELLT GATGGA VLGR HL VSRILIAK  SDSPFGVIRF LNQKISIAN PNSTMILSLV LERTGGLLGE IQVNWETVGP  NSQEALLPQN RDIADPVSL FYFGEGEGGV RTILITYPH EEIEVEETFI IKLHL VKGEA  KLDSRAKDVLT LTIQEFDPN GVVOFAPETL SKKTYSEPLA LEGPLLIJTF  VRRVKGTGE IMVYWELSE FDIETEDFLST SGFTIADGE SEASFDVHLL PDEVPEIEED  YVIQLVSVGE GAELDLEKSI TWFSVYANDD PHGVFALYSD RQSLIGQNL IRSIQNITR  LAGTFGDVAV GLRISSDHKE QPIVTENAER QL VVKDGATY KVDVVPIKQ  VFLSLGSNFT LQLVTVMVL VG GRFYGMPTIL QEAASAVLPV SEKAANSQVG  FESTAFQLMN ITAGTSHVMI SRRGTYGALS VAWTTGYAPG LEIPEFIVVG  NMTPTLGLSL FSHGEQRKGV FLWTFPSGW PEAFVLHLSG VQSSAPGGAQ  LRSGFIVAEI EPMGVFQST SSRNIVSED TQMIRLHVQR LFGHSDLIK VSYQTTAGSA  KPLEDFEPVQ NGELFFQKFQ TEVDFEITI NDQLSEIEEF FYINLTSEI RGLQKFDVNW  SPRLNDFS AVITILDND LAGMDISFPE TTVAVAVDTT LPVETESIT YLSTSKTTTI  LQPTNVVAIV TEATGVSAIP EKL VTLHGTP AVSEKPDVAT VTANVSIHGT  FSLGPSIVYI EEMKNGITFN TAEVLIRRTG GFTGNVSITV KTFGERCAQM  EPNALPFRGI YGISNLTWAV EEDFEEQTL TLIFLDGERE RKVSVQILDD  DEPEGQEFFY VFLTNPQGA QIVEGKDDTG FAAFAMVIIT GSDLHNGIIG  FSEESQSGLE LREGAVMRL HLIIVTRQPNR AFEDVKFWR VTLNKTVVVL  QKDGVNLMEE LQSVSGTTTC TMGQTKCFIS IELKPEKVPQ VE VYFFVELY  EATAGAAINN SARFAQIKIL ESDSQSLVY FSVGSR LAVA HKKATLISLQ  VARDSGTGLM MSVNFSTQEL RSAETIGRTI ISPAISGKDF VITEGILVFE  PGQRSTVLDV ILTPETGSLN SFPKRFQIVL FDPKGGARD KUYGTANITL  VSDADSAIW GLADQLHQPV NDDILNRVLH TISMKVATEN TDEQLSAMMH  LIEKITTEGK IQAFSVASRT LFYEILCSLI NPKRKDTRGF SHFAEVTENF AFSLLTNVTC  GSPGEKSKI LDSCPYLSIL ALHWYPOQIN GHKFEKEDG YIRPERLLD  VQDAEIMAGK STCKLVQFTE YSSQWFFISG NNLPTLKNKV LLSVKGQSS  QLLTNDNEVL YRIYAAEPRI IPQTSCLLW NQAAAASWLS SQFCKVIEET</p>		

576	190168	G Protein-Coupled Receptor GPR58	NM_014626	ADYVEACASH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLA VLSHIF CARYSMFAAK LLTHMMAASL GTQILFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFYVYL VMNDEHTERR YLLFFLLSWG LPAFVVILLI VILKGIYHQ5 MSQIYGLIHG DLCHFNPVYA ALFTAALVPL TCLVVFVVF IHAYQVKPQW KAYDDVFRGR TNAAEIPLL YLFALISVTW LWGGLHMYR HFWMVLV FVI FNSLQGLYVF MVIYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLK PSPQNGATFP SSGGYQGSL IADESQEFD DLIFALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL algtatcat ttatggcagg atccataatc atcaaatat ttggcaatct tgcctatgata attccattt cctacttcaa gcagcttcaac acacaaaca acttccat cctccatc ggcatactg atttctctt gggaticac atcagccat atagtatgat cagatcggtg ggagaactgt ggtatggg gcttaccatt tgaagattt attatagtt tgaactgaig cttagcaiaa catccatttt tcatcttgc tcaglggcca tigtatgatt ttatgctata tttaccat tacttatic caccaaaata actattccag tcaataaag attgctactt ctatgtgt cgtccctgg agcattggcc ttggggggg ttcttcaga ggccatgca gatggaatag agggctatga catcttggt gctgttoca gtccctggcc agtgaigt acaagctat ggggggaccac ctgtttatg gcaggtttct tcactctgg gtctatgag gtggggtt agggcaaaal ttggcagta tccagaaac atgtctatgc catcaataac ttgcgagaa atcaaaataa tcaagtgaag aaagacaaaa aagctgcca aactttagga atagtatag agttttct attatgttg ttcttgtt tcttcaaat ttatggat ccttttga acttctac tctttagt ttgttgat ccttgatg ttgttgct tttaactoca catgtaatcc gttaatat ggtttctt atocctgt ttgcagatga ctgaagtaca ttgtcagg taaatttc agtcaagt tccataatc tatgtgt atgcacaaa aagtgagta g MYSFMAAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLISM AITDFLLGFT IMPYSMIRSV P Homo sapiens ENCWYFGLTF CKIYVSFDM LSITSIFHL SVAIDRFYAI CYPILYSTKI TPVIKRLLL LCWSVPGAF AFGVSEAYA DGIEGYDIL V ACSSCPVMF NKLWGTTLFM AGFFTPGSMV VGIYKIFAV SRKHAHAIN LRENQNNQVK KDKKAAKTLG IVIGVFLCW FPCFFTLDD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRRA LKYILLGKIF SSCFHNTILC MQKESE alggatctaa ctlatatcc cgaagaacta tccagtgtc caaaattgt aaalaagalc ctgtctctcc accaacogct ctttcatgt ccaggtgata atgtattccg ttatgactgg agccatgatt atccattatt cggaaacttg gtataatgg ttccatcgc gcaattcaaa cagcttcat cccacaaa ctcttcat ctctccatgg caaccacgga cttctgtct ggtttgtca ttatgccata cagcataaig cgatcagigg agagtgtctg gtacttggg gatggcttt gtaaatcca cacaagctt gacatgagc tcaactgtac ctccatttc caacttgt ccatgtat tgaocgatt tatgcctgt gtaacottt acattaca accaaaatga cgaactccac cataaagcaa ctgtctggcat ttgtctgtc agttctgtc ctttttct ttgtttagt tctatctgag ggcagattt ccggtatgca gactataag atactgtg ctgtctcaa ttctgtcc ctactica acaattctg ggggacaaia ttgtcacta calgtttct taccctggc tccatcaggg ttgtattta tggcaaatc ttatgctt ocaaacagca tgcctcagc atcagccatg tgcctgaaaa cacaaaggggg gcagtgaaaa aacactatc caagaaaaag gacaggaag cagcgaagac actggctala gtaattggggg tgtttctggc ttgtgtgt cctgtttc ttgttgtt gattgaccca taactagat actacatcc calactaata ttggatctt tagtfggt ccgtacttc aacttact gcaacotct tatcatggc ttittatc calgtttca gaaagcatic aagtacatag tgcagggaa aatattagc tccatcag aaactgcaa ttgttct gaagcacatt aa MDLTYIPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL P Homo sapiens VIMVSISHFK QLHSPNTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG
577	190168	G Protein-Coupled Receptor GPR58	NP_055441.1	MYSFMAAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLISM AITDFLLGFT IMPYSMIRSV P Homo sapiens ENCWYFGLTF CKIYVSFDM LSITSIFHL SVAIDRFYAI CYPILYSTKI TPVIKRLLL LCWSVPGAF AFGVSEAYA DGIEGYDIL V ACSSCPVMF NKLWGTTLFM AGFFTPGSMV VGIYKIFAV SRKHAHAIN LRENQNNQVK KDKKAAKTLG IVIGVFLCW FPCFFTLDD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRRA LKYILLGKIF SSCFHNTILC MQKESE alggatctaa ctlatatcc cgaagaacta tccagtgtc caaaattgt aaalaagalc ctgtctctcc accaacogct ctttcatgt ccaggtgata atgtattccg ttatgactgg agccatgatt atccattatt cggaaacttg gtataatgg ttccatcgc gcaattcaaa cagcttcat cccacaaa ctcttcat ctctccatgg caaccacgga cttctgtct ggtttgtca ttatgccata cagcataaig cgatcagigg agagtgtctg gtacttggg gatggcttt gtaaatcca cacaagctt gacatgagc tcaactgtac ctccatttc caacttgt ccatgtat tgaocgatt tatgcctgt gtaacottt acattaca accaaaatga cgaactccac cataaagcaa ctgtctggcat ttgtctgtc agttctgtc ctttttct ttgtttagt tctatctgag ggcagattt ccggtatgca gactataag atactgtg ctgtctcaa ttctgtcc ctactica acaattctg ggggacaaia ttgtcacta calgtttct taccctggc tccatcaggg ttgtattta tggcaaatc ttatgctt ocaaacagca tgcctcagc atcagccatg tgcctgaaaa cacaaaggggg gcagtgaaaa aacactatc caagaaaaag gacaggaag cagcgaagac actggctala gtaattggggg tgtttctggc ttgtgtgt cctgtttc ttgttgtt gattgaccca taactagat actacatcc calactaata ttggatctt tagtfggt ccgtacttc aacttact gcaacotct tatcatggc ttittatc calgtttca gaaagcatic aagtacatag tgcagggaa aatattagc tccatcag aaactgcaa ttgttct gaagcacatt aa MDLTYIPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL P Homo sapiens VIMVSISHFK QLHSPNTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG
578	190170	G Protein-Coupled Receptor GPR57	NM_014627	ADYVEACASH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLA VLSHIF CARYSMFAAK LLTHMMAASL GTQILFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFYVYL VMNDEHTERR YLLFFLLSWG LPAFVVILLI VILKGIYHQ5 MSQIYGLIHG DLCHFNPVYA ALFTAALVPL TCLVVFVVF IHAYQVKPQW KAYDDVFRGR TNAAEIPLL YLFALISVTW LWGGLHMYR HFWMVLV FVI FNSLQGLYVF MVIYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLK PSPQNGATFP SSGGYQGSL IADESQEFD DLIFALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL algtatcat ttatggcagg atccataatc atcaaatat ttggcaatct tgcctatgata attccattt cctacttcaa gcagcttcaac acacaaaca acttccat cctccatc ggcatactg atttctctt gggaticac atcagccat atagtatgat cagatcggtg ggagaactgt ggtatggg gcttaccatt tgaagattt attatagtt tgaactgaig cttagcaiaa catccatttt tcatcttgc tcaglggcca tigtatgatt ttatgctata tttaccat tacttatic caccaaaata actattccag tcaataaag attgctactt ctatgtgt cgtccctgg agcattggcc ttggggggg ttcttcaga ggccatgca gatggaatag agggctatga catcttggt gctgttoca gtccctggcc agtgaigt acaagctat ggggggaccac ctgtttatg gcaggtttct tcactctgg gtctatgag gtggggtt agggcaaaal ttggcagta tccagaaac atgtctatgc catcaataac ttgcgagaa atcaaaataa tcaagtgaag aaagacaaaa aagctgcca aactttagga atagtatag agttttct attatgttg ttcttgtt tcttcaaat ttatggat ccttttga acttctac tctttagt ttgttgat ccttgatg ttgttgct tttaactoca catgtaatcc gttaatat ggtttctt atocctgt ttgcagatga ctgaagtaca ttgtcagg taaatttc agtcaagt tccataatc tatgtgt atgcacaaa aagtgagta g MYSFMAAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLISM AITDFLLGFT IMPYSMIRSV P Homo sapiens ENCWYFGLTF CKIYVSFDM LSITSIFHL SVAIDRFYAI CYPILYSTKI TPVIKRLLL LCWSVPGAF AFGVSEAYA DGIEGYDIL V ACSSCPVMF NKLWGTTLFM AGFFTPGSMV VGIYKIFAV SRKHAHAIN LRENQNNQVK KDKKAAKTLG IVIGVFLCW FPCFFTLDD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRRA LKYILLGKIF SSCFHNTILC MQKESE alggatctaa ctlatatcc cgaagaacta tccagtgtc caaaattgt aaalaagalc ctgtctctcc accaacogct ctttcatgt ccaggtgata atgtattccg ttatgactgg agccatgatt atccattatt cggaaacttg gtataatgg ttccatcgc gcaattcaaa cagcttcat cccacaaa ctcttcat ctctccatgg caaccacgga cttctgtct ggtttgtca ttatgccata cagcataaig cgatcagigg agagtgtctg gtacttggg gatggcttt gtaaatcca cacaagctt gacatgagc tcaactgtac ctccatttc caacttgt ccatgtat tgaocgatt tatgcctgt gtaacottt acattaca accaaaatga cgaactccac cataaagcaa ctgtctggcat ttgtctgtc agttctgtc ctttttct ttgtttagt tctatctgag ggcagattt ccggtatgca gactataag atactgtg ctgtctcaa ttctgtcc ctactica acaattctg ggggacaaia ttgtcacta calgtttct taccctggc tccatcaggg ttgtattta tggcaaatc ttatgctt ocaaacagca tgcctcagc atcagccatg tgcctgaaaa cacaaaggggg gcagtgaaaa aacactatc caagaaaaag gacaggaag cagcgaagac actggctala gtaattggggg tgtttctggc ttgtgtgt cctgtttc ttgttgtt gattgaccca taactagat actacatcc calactaata ttggatctt tagtfggt ccgtacttc aacttact gcaacotct tatcatggc ttittatc calgtttca gaaagcatic aagtacatag tgcagggaa aatattagc tccatcag aaactgcaa ttgttct gaagcacatt aa MDLTYIPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL P Homo sapiens VIMVSISHFK QLHSPNTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG
579	190170	G Protein-Coupled Receptor	NP_055442.1	ADYVEACASH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLA VLSHIF CARYSMFAAK LLTHMMAASL GTQILFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFYVYL VMNDEHTERR YLLFFLLSWG LPAFVVILLI VILKGIYHQ5 MSQIYGLIHG DLCHFNPVYA ALFTAALVPL TCLVVFVVF IHAYQVKPQW KAYDDVFRGR TNAAEIPLL YLFALISVTW LWGGLHMYR HFWMVLV FVI FNSLQGLYVF MVIYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLK PSPQNGATFP SSGGYQGSL IADESQEFD DLIFALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL algtatcat ttatggcagg atccataatc atcaaatat ttggcaatct tgcctatgata attccattt cctacttcaa gcagcttcaac acacaaaca acttccat cctccatc ggcatactg atttctctt gggaticac atcagccat atagtatgat cagatcggtg ggagaactgt ggtatggg gcttaccatt tgaagattt attatagtt tgaactgaig cttagcaiaa catccatttt tcatcttgc tcaglggcca tigtatgatt ttatgctata tttaccat tacttatic caccaaaata actattccag tcaataaag attgctactt ctatgtgt cgtccctgg agcattggcc ttggggggg ttcttcaga ggccatgca gatggaatag agggctatga catcttggt gctgttoca gtccctggcc agtgaigt acaagctat ggggggaccac ctgtttatg gcaggtttct tcactctgg gtctatgag gtggggtt agggcaaaal ttggcagta tccagaaac atgtctatgc catcaataac ttgcgagaa atcaaaataa tcaagtgaag aaagacaaaa aagctgcca aactttagga atagtatag agttttct attatgttg ttcttgtt tcttcaaat ttatggat ccttttga acttctac tctttagt ttgttgat ccttgatg ttgttgct tttaactoca catgtaatcc gttaatat ggtttctt atocctgt ttgcagatga ctgaagtaca ttgtcagg taaatttc agtcaagt tccataatc tatgtgt atgcacaaa aagtgagta g MYSFMAAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLISM AITDFLLGFT IMPYSMIRSV P Homo sapiens ENCWYFGLTF CKIYVSFDM LSITSIFHL SVAIDRFYAI CYPILYSTKI TPVIKRLLL LCWSVPGAF AFGVSEAYA DGIEGYDIL V ACSSCPVMF NKLWGTTLFM AGFFTPGSMV VGIYKIFAV SRKHAHAIN LRENQNNQVK KDKKAAKTLG IVIGVFLCW FPCFFTLDD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRRA LKYILLGKIF SSCFHNTILC MQKESE alggatctaa ctlatatcc cgaagaacta tccagtgtc caaaattgt aaalaagalc ctgtctctcc accaacogct ctttcatgt ccaggtgata atgtattccg ttatgactgg agccatgatt atccattatt cggaaacttg gtataatgg ttccatcgc gcaattcaaa cagcttcat cccacaaa ctcttcat ctctccatgg caaccacgga cttctgtct ggtttgtca ttatgccata cagcataaig cgatcagigg agagtgtctg gtacttggg gatggcttt gtaaatcca cacaagctt gacatgagc tcaactgtac ctccatttc caacttgt ccatgtat tgaocgatt tatgcctgt gtaacottt acattaca accaaaatga cgaactccac cataaagcaa ctgtctggcat ttgtctgtc agttctgtc ctttttct ttgtttagt tctatctgag ggcagattt ccggtatgca gactataag atactgtg ctgtctcaa ttctgtcc ctactica acaattctg ggggacaaia ttgtcacta calgtttct taccctggc tccatcaggg ttgtattta tggcaaatc ttatgctt ocaaacagca tgcctcagc atcagccatg tgcctgaaaa cacaaaggggg gcagtgaaaa aacactatc caagaaaaag gacaggaag cagcgaagac actggctala gtaattggggg tgtttctggc ttgtgtgt cctgtttc ttgttgtt gattgaccca taactagat actacatcc calactaata ttggatctt tagtfggt ccgtacttc aacttact gcaacotct tatcatggc ttittatc calgtttca gaaagcatic aagtacatag tgcagggaa aatattagc tccatcag aaactgcaa ttgttct gaagcacatt aa MDLTYIPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL P Homo sapiens VIMVSISHFK QLHSPNTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG

GPR57

580	190188	G Protein- Coupled Receptor LGR6	AB049405	A	Homo sapiens
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ctggccctg cttgctgct ctaaaocct cttgaocct tcttcaoccc caacttccgg gtagacttc gggtggcttgg  
gggtccggcagg gggtcccttag ctatgtctg gggtggggagc tggagagagag ctctgtgat tctacacagg  
ccctggtagc ctctctgat gttgtgactca ttctgagag ttctgagct gggtggggcc cttgggttag gacataggc  
ttccctcag tgaacctat ctctgtcag caggccagggcc ccccaagctt gggtggggcagc cattgtgtag agccagaggg  
gaaocactt gggaacccc aaocctocat gtagggagaa ctggctgga gggtcagggg atciacgca gcaagtgag  
gcttgcagg gggtggggc tttagccct ctgggtggc cttgtcga cagtgtagaa tatccctccc cattctct tccctctc



581	190188	G Protein-Coupled Receptor LGR6	AAG17168.1	<p>                     ttoctttcc tctctccccc tctgttgatg atggctgctt ctataacaaa tacaacaaa actacagcagt gtagctata gcaagatggc                      ccagtaacctg gctocactga tcaactctct cctgtgacca tacaacagg gtagctcttg gccctgctt ccttggtctt tctcagctt                      cacttgata ctgggctct tctgtgcat gctggaagt gtagaccaga gacttgact ttgtctgct taagggaal gagggaagta                      aagacagta aggggtggag gggtatca                      MRLEGGRSA RAGQNL SRAG SARRGAPRDL SMNNL TELQP GLFHHLRFLE                      ELRLSGNHLH HPQAFSG L YSLKILMLQN NQLGGIPAEA L WELPSLQSL                      DLNYNKLQEF PVAIRTLGRL QELGFHNNNI KAIPKAFMG NPLLTTHFY                      DNPIQFVGRS AFQYLPKLHT LSLNGAMDIQ EFPDLKGTTLS LEILTLTRAG                      IRLPSGMCQ QLPRLRVLEL SHNQIEELPS LHRCQKLEI GLQHNRIWEI GADTFSQLSS                      LQALDLSWNA IRSIHPEAFS TLHSL VKLDL TDNQLTTLPL AGLGLMHLK                      LKGNLALSQA FSKDSFPKLR ILEVYAYQC CPYGMCSFF KASGQWEAED                      LHLDEESSK RPLGLLARQA ENHYDQDLDE LQLEMEDSKP HPSVQCSPTP                      GPFKPCYLF ESWGIRLAVW AIVLLSVLCN GLVLLTVFAG GPVPLPPVKF                      VVGAAGANT LTIGSCGLLA SVDALTFGQF SEYGARWETG LGCRATGFLA                      VLGEASVLL LTLAAVQCSV SVSCVRA YGK SPSLGSVRAG VLGCLALAGL                      AAALPLASVG EYGASPLCLP YAPPEGQPAAL LGFTVAL VMM NSFCFLVAG                      AYIKLYCDLP RGDFAVWDC AMVRHVAWLI FADGLLYCPV AFLSFASMLG                      LFPVTPEAVK SVLLVVLPL ACLNPLLYLL FNPFRDDDLR RLRPRAGDSG                      PLAYAAAGEL EKSSCDSTQA LVAFSDVDLI LEASEAGRPP GLETYGFPSV                      TLSCQQPGA PRLEGSHCPE PEGNHFGNPQ PSMDGELLR AEGSTPAGGG                      LSGGGGFQPS GLALLHTY                 </p>	P	Homo sapiens
582	190414	G Protein-coupled Receptor GPR101	AF411115	<p>                     atgacgtoca cctgaccaa cagcagcgc gagagtaaca gacagcacac gtagcagccc ctctccaaa tgcocatcag                      cctggccac ggcatacc gctcaacct gctgtgtatc ttctcggc cctcttct gggcaacata gtagctgggc                      taggtgtga ggcgaagccg cagctgtgc aggtgaccaa cctgtttac tttaacctc tggtaacaga cctgtgtcag                      atttctcg tggccccc ggtgtgtgccc acctgtgc ctctctg gccctcaac agccactct gcaaggccct                      ggttagctc accaactgt tggcttgc cagcgtcaac accatgtcg tgggtcagt ggaicgtac tigtocata tcaacct                      ctctaacccg tacaagatga cccagcggccg cgggttaacct ctctctatg gcaactgtgat tgggtccalc ctgcagagca                      ctctccact ctacggctgg ggcagagctg ccttgatga g-cgcaatgct ctgtgtcca tgaicgggg ggcagccc                      agctacata ttctagct ggtgtcttc atgtcatic cactgtatg catgattgoc tgaactccg tgggtgtctg tgcagccc                      aggcagcag ctctgtgta caatgtcaa gacacagct tggaggtgag agtcaagagac tgggtgtgaga atgaggtatga                      agaggtgagca agagagagag agaggttoca agaggtgagat aggttgcgc gccagcagta aggtgtgaggtc aaggtccaaag                      agggcagat agagagocaa gacggcagcc tgaagggocaa agaggtgagac aggggtgagca gtagagtag tgaaggtgoc                      aggggtgagc agaggtgagc agaggtgagc acgtgtgtgcca g-cgacggcag catgtgtgag aggtgtgagca gacacaaat                      tgaagtagaac agcatgtgagc cagacagggc tgcacagag gtaacacat gcaacatga ctgtgtgaga gtagacatgg                      aggtgtgag agacagcagc aatttcagct aggtgtgagc aggtgtgagc aacatcccg aggtgtgagc accaactgt                      cgtaacagca acagcaacc tctctgccc aggtgtgagc aggtgtgagc aggtgtgagc atcttca tcatgtctc ctatgtgta                      tccctggggc cctagctt tttagcagc ctggccgtgt ggtgtgtgt gtagagcag gtagagcag gtagagcag                      cataatcag tggctttct tctgtcagc ctgtatccac cctatgtct atgtgtatcat gcaacagacc attagagag aatccagga                      catgtgtgag aggtgtct gcaaggtgaaa gccccggaaa gaaatagacc accaagacct gcccggaaca gagggtgtgga                      ctgaaggtgcaa gattgtcct tctagcatt ctgtacttt tcttga                 </p>	A	Homo sapiens

583	190414	G Protein-coupled Receptor GPR101	CAC33098.1	MTSTCTNSTR ENSSHTCMP LSKMPISLAH GIRSTVLVI FLAASFVGNV VLALVLQRKP P QLLQVTNRFI FNLLVTDLLQ ISLVAPWVVA TSVPLFWPLN SHFCTALVSL THLFAFASVN TIVLVSDRY LSIHPLSY SKMTQRRGYL LLYGTWIVAI LQSTPPLYGW QAAAFDERNA LCSMIWGASP SYTILSVVSF IVIPLIVMIA CYSVVFCAAR RQHALLYNVK RLSLEVRVKD CVENEDEEGA EKKEEFQDES EFRROHEGEV KAKEGRMEAK DGSILKAKES TGTSESSVEA RGSEEVRESS TVASDGSMEG KEGSTKVEEN SMKADKGRTE VNQCSIDLGE DGMEFGEDDI NFSEDDVEAV NIPESLPPSR RNSNSNPPLP RCYQCKAAKV IFIIFSYVL SLGPYCF LAV LAVVVDVETQ VPQWVITIII WLFLLQCCIH PYVYGVMHKT IKKEIQDMLK KFFCKEKKPPK EDSHPDLP GT EGGTEGKIVP SYDSATFP	Homo sapiens
584	190418	Inflammation- Related G Protein-Coupled Receptor EX33	NM_020370	taactgtcca ccagaaagga ctgctcttg ggtgagttga actcttcca ttatagaag aattgaaggc tgagaaactc agcctctalc A atgtggaaaca gctctgacgc caacttctcc tgcctaccatg agctgtgct gggtctatcgt taigtgtcag tagctggggg ggtgtgtgtg gctgtgacag gcaccgtggg caatgtgtc accctactgg ccttggccal ccagccaag ctccgtacc gattcaact gctcatagcc aactctaac tggctgact cctctactgc agctctctc agcctctctc tgttgacacc taactccacc tgcactggcg caocgggtgc acccttcca gggatattgg gctctcctt ttgcttcca atctgtctc calcttgacc ctctgcctca tgcactggcg accctactc ctacttccc accctaaagt ttccccaa gttttcag ccaaggggat agtgcgtggca ctgtgtgagca cctgggtgtgt gggcggtggcc agcttggctc cctctggcc tatttalc ctgtgtaccg tagctgtcac ctgcagctt gaccgcalcc gagccggcc ttaccacc atctctatgg gcatctact tgtgtgtgg ctacagcag tttgcaict ctattgctc atccaccgcc aggtcaaacg agcagcacag gcactggacc aataaagt ggcacaggca agcatccact ccaaccatgt ggccaggact gatgagcca tgcctgtgtg ttccaggag ctggagaca ggttagcalt tggagagacc agtgaaggga tttcatctga gccagtcagt gctgtccacca ccagaccct ggaaggggac tcatcagaag tggagagacca gatcaacagc aagagagacta agcagatggc agagaaaagc cctccagaag catctgcca agccagcca attaaaggag ccagaagagc tcgggattct tcatgggaat ttgggaagt gactgaatg tgtttgtc tgtctctg ctgttcctg agctacatc cctctgtct gctcaacat ctggatgcca gagtccaggc tcccgggtg gtccacatg ttgtgtccaa cctcacctgg ctcaatggt gcatcaacc tgtctctat gccagcatga accgccaat cgcaccaagca tatggctcca tttaaaaag agggcccg agtgtccata ggctccatta gaactgtgac cctagtcacc agaattcagg actgtctct ccagggaocaa agtggccagg taataggaga ataggtgaaa taacacatgt gggcatttc acaaatct ctcccagcc tcccaatca agtcttcca tcaactgalt aatgttcag ccttagactg ccaaggagt atttaaat attaataat gaattctgt ctttaaaa aaaaaaata aaaaaagaaa aaaaaataa aaaaaaata aaaaaa	Homo sapiens
585	190418	Inflammation- Related G Protein-Coupled Receptor EX33	NP_065103.1	MWNSSDANFS CYHESVLGYR YVAVSWGTVV AVTGTVGNVL TLLALAIQPK P LRTRFNLLIA NLTLADLLYC TLLQPFSDVT YLHLHWRTGA TFCRVFGLLL FASNSVSLT LCIALGRYL LIAHPKLFQ VFSAKGIVLA LVSTWVVGVA SFAPLWPIYI LVPVVTCSF DRIRGRPYT ILMGIYFVLG LSSVGIFYCL IHRQVKRAAQ ALDQYKLRQA SIHNSHVART DEAMPGRFQE LDSRLASGPP SEGISEPVS AATTQTLEGD SSEVGDQINS KRAQMAEKS PPEASAKAQP IKGARRAPDS SSEFGKVTRM CFAVFLCFAL SYPFLLLNI LDARVQAPRV VHMLAANLTW LNGCINPVLY AAMNRQFRQA YGSILKRGPR SFHRLH ctttgtcca gactaaacc agttttct cttccacag caaatatct gacagatc atctctccc agctgtgtggc aagaagacag A aagctctct acaactatct ctggcactc gctgtgtccg acatctgt cctctttt atagtgtt tggactct gtttgagat ttcatctga acatgcat gctcaggic ccggacaga tcatagaagt gctggaatc tcatcatcc acactccat atggattact	Homo sapiens
586	190419	G Protein- Coupled Receptor Ls190419	AJ303165		Homo sapiens

587	190419	G Protein- Coupled Receptor Ls190419	CAC33085.1	LCFRKPVFL LSTANILTVI ILSQLVARRQ KSSYNVLLAL AAADILVLFV IVFVDFLLLED P	Homo sapiens
588	190427	CysteinyI Leukotriene CYSLT2 Receptor	NM_020377	<p>aagtttctta agtttgaagc gtcagcttca accaacaaca ttaattggccta ttctacattc aaaaatcagg aaatttaaat ttattatga</p> <p>atgtaatgca gcatgtagta aagacttaac cagtgitttta aaactcaact ttaagaaga agatagtatt gctccctgti tcatiaaaac</p> <p>ctagaagat gtaatcagta agcaagaagg aaaaaggga atcaaaaag taacttttg tgcctgtttc ttittaaacc agcatggaga</p> <p>gaaaatttt gtccttgcaa ccaatcattt cgtatcaga aatggaaaca aatggcaact ttagcaataa caacagcagg</p> <p>aaatgcacaa ttgaanaact caagagagaa ttittcccaa ttgtatatct gataatatt ttctggggaa tcttgggaaa tgggtgttc</p> <p>atataatgt tctgtcagcc ttataagaag tccatcttg tgaacgttt tgaatattt ttgggggaa tcttgggaaa tgggtgttc</p> <p>acgtttccct tcaaggctga ctattatct agaggctoca attggaat ttggagacctg gcttcagga ttatgtctia ttctgtat</p> <p>gtcaacatgt acagcagat ttatttctg accgtgtcga gttgtgtcgt ttcttgca atgtgttacc cctttcgtct tctgtcgtc</p> <p>accagcatca ggaatgtcgt gactctgt gggatcatat ggaatctat catgtcttc tcaataatgc tcttgggaa tcttgggaa</p> <p>tggctctgag caagaaggca gttcaccatc atgtcttagag ctgaatctct ataaaatgc taaagctgcag accatgaact atattgctt</p> <p>gggtgtgggc tgcctgtcgc cattttacc actcagcacc tttatctg tgaatctg gttctgtgtt aagtggtgag tccagaatc</p> <p>gggtgtgtcgc gttctcaca ggaaggcact gaaccaccatc atcaatcct tgaatcct cttctgtgt ttctgtccct atcaacact</p> <p>gaggaaccgc cacttgacga catgggaaat ggggtttatgc aagaacagac ttgcaataagc ttgggtatc acactgtgct</p> <p>tggcagcagc caatgtcctgc ttcaatctc tgccttatta cttgtctggg ggaatttta aggaacagact aagatctgca</p> <p>ctagaanaag gocatocaca gaaggcaaa acaaaagtgt ttctcgti tagtgtgtgt ttgagaaagg aaacaagagt</p> <p>ataaggagct cttagatgag acctgtctt gtaatctgt gtccatctc atcaatcct agttccaaa ttgactttga ttacatc</p> <p>tccacaacaa tgttgtat ttatatttag ttgacalia ctttgttaa ttgaacctac ttcaanaat ttatcagtg ttatttcat</p> <p>tgttgtatct taatgaggga tacaaggaga aaaaatcccta ctgagctct gttgggtcga atatcagact ggggaanaat</p> <p>gcaaaagcaca ttggatctta ctttttca gatatgaac cagatctctg gccaacagg ctttttaaat tcttcaaaag agccacaact</p> <p>tcccaagcti ctocagctcc cctgtctct tcaatccti gatatatagc aactaacgac gctacttgga gccccagagc</p> <p>agaaaaggga cacatctaa gattcagggga aagactaact gtgaanaaga aggtctgtcti atacaanaag agcatcaagt</p> <p>cccaagtgaag gacagtga gaagaagggtg agaaaggatg gaaacaaaga gaactgtgcaa taagttagggg aagtgagaagt</p> <p>ttattttgc atggggaag aggttttaac acactgaag caacctatt tctatgtt tctctgtcc aggtgtttag gaaaggacag</p> <p>aaaaatgaaga ggaagatctg gggcatgtcc ctaggaaatg aagaattgt gtaagaatg gaagggtgtat catcaaggtac</p> <p>atgtatctca aatttttt ttgagatgcagg ttatgtacc ttgtgtcagt tctcttccc ataatcat ttggatggaa gccaanaata</p> <p>aaaggaggtgc cctgtgagat taggtgtgag cactcaaggg aagaatggag tagaggggcaa atagcaaaaag ttgtgtcact</p> <p>cctgaatc tattaacatt tccgcaagaag atgagtaggg agtatgtcgt ttccctttg agatagtgta gaaaacact agtatgtgtg</p> <p>agaggttctt ttctgtocat tgaacaacagg ctgaaggatc taccactac taccacatg accatgtac ttgaacaact ttgaatgagt</p>	Homo sapiens

589	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	ctccctgcag ggagatlat gccagccact ttacattgt tgaatccatt accaaagctc tgaattccat ttacagctg aagaaatga agcttagaga aatlaagaag ctgtttaag ttacacagc tagtaagaat ttaaaatc tctgtgcaga agtgttgcct gggtgtctc cccaccacta ccttggiaaa ctccaggaa gattgttga aagtgtgaat aaaagctgtc ctctccacc aattctcc ccctccac tctcaaga aaaccaaaag ttctctca gattgttga ctataglac agtaaaaggt ggaggtgata tggcattctg aaagttaga gggactaagt cagtgtcat actaac MERKFMSLQP SISVSEMEPN GTFNNNSRN CTIENFKREF FPVYL IFF WGVLGNGLSI P YVFLQPKKS TSVNVFMLNL AISDLLFIST LPFRADYYLR GSNWIFGDLA CRUMSYSLYV NMYSSVFLT VLSVVRFLAM VHPFRLHVT SRSAWILCG IIVILIMASS IMLLDSGSEQ NGSVTSCLEL NLYKIAKLQT MNYIALVVC LLPFTLSIC YLLIIRVLK VEVPESGLRV SHRKALTTII ITLIIFLCF LPYHTLRTVH LTTWKVGLCK DRLHKALVT LALAAANACF NPLLYYFAGE NFKDRLKSAL RKGHPQKAKT KCVFPVS VWL RKETRV A cctgtgtgccc acgtgtcgtga caaatctaa ctctcaagg actccaaaa cagaagacac caggagccctg aatgggggaaac gattctga gctacagta tggggattac agcgactct cggaccgccc tgtggactgc ctggatggcg cctgtccggc caltcgacccg ctgcgcgtgg ccccgctccc actgtatgcc gccatctcc tgggtgggggt gccggggcaat gccatgttgg cctgtgtggc tgggaaaggtg gccggccggga ggggtgggtgc caactgtgtg ctacccgg ccgtggccgga ttgtctgtgc tgtttgtc tgcctatct ggcatgtccc atggccgtg gaaggccactg gccgtatgtg gccatggggct gtccggcgct ggcctccatc atcctgtctga ccaltgtatgc cagcgtctgc ctccggcag ctctcagtc cgaactctgc ttccgtgtc tcgggctgc ctgtgtgtc acgtgtcagc gggcggtgcgg ggtgcaggtg gctgtggggc cagcctgggac actggcctg ctgtctatcc tgcctctgc calctaccg cgggtgtcac ccaggagacti ccaagccggc ctgcaggtg tgggtggaacta cggcggtctc tccagcaccg agaatgcgtt gactgtccalc cgggttcti ttgcttct gggggccctg gtggccgtgg ccagctgtcca cagtgtctc ctgtgtcggg cagcccgagc ctgcggccgg ctggggccag ccatgtgtgt ggggtttt gtctgtggg caocctacca cctgtgtggg ctgtgtgtc cgtgtggcgcc cccgaactgc gcaactctgg ccaaggccct gggggtgaa cccctatcg tgggctgtgc cctgtctac agctgtctca atccatgt ctccgtat ttgggtgggg ctcaactcg ccgtgtactg ccagctgcti gctactgggc cctgtggggg tccagggggc aggaacgaag tgtggacagc aagaaatcca ccagccaltga cctgtgtcgt ggaatggagg tgaagctgg agagacattg tgggtgtgta tctctatc tcatticaca agactgtgtt caggcatagc tggatccagg agctcaatga tgtctcat ttatctct cttatcaca cagalacca tcaltgacti gctatgtga aggccttiti aggcactaga gataagcag tgaacaaa agacacaaat cctggcc MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAFLVGV P PGNAMVAWVA GKVARRRVA TWLLHLAVAD LLCLSLPL AVPIARGGHW PYGAVGCRAL PSILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGFL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPM LFLYFGRAQLR RSLPAACHWA LRESQGDDES VDSKKSTSHD LVSEMEV atgtgtggcc ctgtgtct ggggtcagc ctgtgtgtc tctgtcaacc tgggaggggg gccccattgt gctgtcaca gcaactagg algaaggggg actatgtct ggggggggtg ttccctcgg gcgagggcca ggaagctggc ctccgcagcc gggacagcc cagcagccct gtgtgcacca ggtacagagg tgggacggcg tgggtcgggg tcaagggtgac caggtctggg gtgtctga gctggggccg aggtggccat ctgtgtgtct gtgtgtgtc aggttctct caaacggct gctgtggga ctggccaltga aaatggccgt ggaaggagatc aacaacaagt cggatctgt gcccggggctg cggctggggct acgactct tgatagctgc tgggagctg tgggtggcat gaagccagc ctaattgtc tgggcaaggc aggcagccgc gacatgcgg	Homo sapiens
590	190437	G Protein- Coupled Receptor C5L2	NM_018485	aaagttaga gggactaagt cagtgtcat actaac MERKFMSLQP SISVSEMEPN GTFNNNSRN CTIENFKREF FPVYL IFF WGVLGNGLSI P YVFLQPKKS TSVNVFMLNL AISDLLFIST LPFRADYYLR GSNWIFGDLA CRUMSYSLYV NMYSSVFLT VLSVVRFLAM VHPFRLHVT SRSAWILCG IIVILIMASS IMLLDSGSEQ NGSVTSCLEL NLYKIAKLQT MNYIALVVC LLPFTLSIC YLLIIRVLK VEVPESGLRV SHRKALTTII ITLIIFLCF LPYHTLRTVH LTTWKVGLCK DRLHKALVT LALAAANACF NPLLYYFAGE NFKDRLKSAL RKGHPQKAKT KCVFPVS VWL RKETRV A cctgtgtgccc acgtgtcgtga caaatctaa ctctcaagg actccaaaa cagaagacac caggagccctg aatgggggaaac gattctga gctacagta tggggattac agcgactct cggaccgccc tgtggactgc ctggatggcg cctgtccggc caltcgacccg ctgcgcgtgg ccccgctccc actgtatgcc gccatctcc tgggtgggggt gccggggcaat gccatgttgg cctgtgtggc tgggaaaggtg gccggccggga ggggtgggtgc caactgtgtg ctacccgg ccgtggccgga ttgtctgtgc tgtttgtc tgcctatct ggcatgtccc atggccgtg gaaggccactg gccgtatgtg gccatggggct gtccggcgct ggcctccatc atcctgtctga ccaltgtatgc cagcgtctgc ctccggcag ctctcagtc cgaactctgc ttccgtgtc tcgggctgc ctgtgtgtc acgtgtcagc gggcggtgcgg ggtgcaggtg gctgtggggc cagcctgggac actggcctg ctgtctatcc tgcctctgc calctaccg cgggtgtcac ccaggagacti ccaagccggc ctgcaggtg tgggtggaacta cggcggtctc tccagcaccg agaatgcgtt gactgtccalc cgggttcti ttgcttct gggggccctg gtggccgtgg ccagctgtcca cagtgtctc ctgtgtcggg cagcccgagc ctgcggccgg ctggggccag ccatgtgtgt ggggtttt gtctgtggg caocctacca cctgtgtggg ctgtgtgtc cgtgtggcgcc cccgaactgc gcaactctgg ccaaggccct gggggtgaa cccctatcg tgggctgtgc cctgtctac agctgtctca atccatgt ctccgtat ttgggtgggg ctcaactcg ccgtgtactg ccagctgcti gctactgggc cctgtggggg tccagggggc aggaacgaag tgtggacagc aagaaatcca ccagccaltga cctgtgtcgt ggaatggagg tgaagctgg agagacattg tgggtgtgta tctctatc tcatticaca agactgtgtt caggcatagc tggatccagg agctcaatga tgtctcat ttatctct cttatcaca cagalacca tcaltgacti gctatgtga aggccttiti aggcactaga gataagcag tgaacaaa agacacaaat cctggcc MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAFLVGV P PGNAMVAWVA GKVARRRVA TWLLHLAVAD LLCLSLPL AVPIARGGHW PYGAVGCRAL PSILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGFL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPM LFLYFGRAQLR RSLPAACHWA LRESQGDDES VDSKKSTSHD LVSEMEV atgtgtggcc ctgtgtct ggggtcagc ctgtgtgtc tctgtcaacc tgggaggggg gccccattgt gctgtcaca gcaactagg algaaggggg actatgtct ggggggggtg ttccctcgg gcgagggcca ggaagctggc ctccgcagcc gggacagcc cagcagccct gtgtgcacca ggtacagagg tgggacggcg tgggtcgggg tcaagggtgac caggtctggg gtgtctga gctggggccg aggtggccat ctgtgtgtct gtgtgtgtc aggttctct caaacggct gctgtggga ctggccaltga aaatggccgt ggaaggagatc aacaacaagt cggatctgt gcccggggctg cggctggggct acgactct tgatagctgc tgggagctg tgggtggcat gaagccagc ctaattgtc tgggcaaggc aggcagccgc gacatgcgg	Homo sapiens
591	190437	G Protein- Coupled Receptor C5L2	NP_060955.1	aaagttaga gggactaagt cagtgtcat actaac MERKFMSLQP SISVSEMEPN GTFNNNSRN CTIENFKREF FPVYL IFF WGVLGNGLSI P YVFLQPKKS TSVNVFMLNL AISDLLFIST LPFRADYYLR GSNWIFGDLA CRUMSYSLYV NMYSSVFLT VLSVVRFLAM VHPFRLHVT SRSAWILCG IIVILIMASS IMLLDSGSEQ NGSVTSCLEL NLYKIAKLQT MNYIALVVC LLPFTLSIC YLLIIRVLK VEVPESGLRV SHRKALTTII ITLIIFLCF LPYHTLRTVH LTTWKVGLCK DRLHKALVT LALAAANACF NPLLYYFAGE NFKDRLKSAL RKGHPQKAKT KCVFPVS VWL RKETRV A cctgtgtgccc acgtgtcgtga caaatctaa ctctcaagg actccaaaa cagaagacac caggagccctg aatgggggaaac gattctga gctacagta tggggattac agcgactct cggaccgccc tgtggactgc ctggatggcg cctgtccggc caltcgacccg ctgcgcgtgg ccccgctccc actgtatgcc gccatctcc tgggtgggggt gccggggcaat gccatgttgg cctgtgtggc tgggaaaggtg gccggccggga ggggtgggtgc caactgtgtg ctacccgg ccgtggccgga ttgtctgtgc tgtttgtc tgcctatct ggcatgtccc atggccgtg gaaggccactg gccgtatgtg gccatggggct gtccggcgct ggcctccatc atcctgtctga ccaltgtatgc cagcgtctgc ctccggcag ctctcagtc cgaactctgc ttccgtgtc tcgggctgc ctgtgtgtc acgtgtcagc gggcggtgcgg ggtgcaggtg gctgtggggc cagcctgggac actggcctg ctgtctatcc tgcctctgc calctaccg cgggtgtcac ccaggagacti ccaagccggc ctgcaggtg tgggtggaacta cggcggtctc tccagcaccg agaatgcgtt gactgtccalc cgggttcti ttgcttct gggggccctg gtggccgtgg ccagctgtcca cagtgtctc ctgtgtcggg cagcccgagc ctgcggccgg ctggggccag ccatgtgtgt ggggtttt gtctgtggg caocctacca cctgtgtggg ctgtgtgtc cgtgtggcgcc cccgaactgc gcaactctgg ccaaggccct gggggtgaa cccctatcg tgggctgtgc cctgtctac agctgtctca atccatgt ctccgtat ttgggtgggg ctcaactcg ccgtgtactg ccagctgcti gctactgggc cctgtggggg tccagggggc aggaacgaag tgtggacagc aagaaatcca ccagccaltga cctgtgtcgt ggaatggagg tgaagctgg agagacattg tgggtgtgta tctctatc tcatticaca agactgtgtt caggcatagc tggatccagg agctcaatga tgtctcat ttatctct cttatcaca cagalacca tcaltgacti gctatgtga aggccttiti aggcactaga gataagcag tgaacaaa agacacaaat cctggcc MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAFLVGV P PGNAMVAWVA GKVARRRVA TWLLHLAVAD LLCLSLPL AVPIARGGHW PYGAVGCRAL PSILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGFL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPM LFLYFGRAQLR RSLPAACHWA LRESQGDDES VDSKKSTSHD LVSEMEV atgtgtggcc ctgtgtct ggggtcagc ctgtgtgtc tctgtcaacc tgggaggggg gccccattgt gctgtcaca gcaactagg algaaggggg actatgtct ggggggggtg ttccctcgg gcgagggcca ggaagctggc ctccgcagcc gggacagcc cagcagccct gtgtgcacca ggtacagagg tgggacggcg tgggtcgggg tcaagggtgac caggtctggg gtgtctga gctggggccg aggtggccat ctgtgtgtct gtgtgtgtc aggttctct caaacggct gctgtggga ctggccaltga aaatggccgt ggaaggagatc aacaacaagt cggatctgt gcccggggctg cggctggggct acgactct tgatagctgc tgggagctg tgggtggcat gaagccagc ctaattgtc tgggcaaggc aggcagccgc gacatgcgg	Homo sapiens
592	190438	G Protein- Coupled Receptor Ls190438	LG94114	aaagttaga gggactaagt cagtgtcat actaac MERKFMSLQP SISVSEMEPN GTFNNNSRN CTIENFKREF FPVYL IFF WGVLGNGLSI P YVFLQPKKS TSVNVFMLNL AISDLLFIST LPFRADYYLR GSNWIFGDLA CRUMSYSLYV NMYSSVFLT VLSVVRFLAM VHPFRLHVT SRSAWILCG IIVILIMASS IMLLDSGSEQ NGSVTSCLEL NLYKIAKLQT MNYIALVVC LLPFTLSIC YLLIIRVLK VEVPESGLRV SHRKALTTII ITLIIFLCF LPYHTLRTVH LTTWKVGLCK DRLHKALVT LALAAANACF NPLLYYFAGE NFKDRLKSAL RKGHPQKAKT KCVFPVS VWL RKETRV A cctgtgtgccc acgtgtcgtga caaatctaa ctctcaagg actccaaaa cagaagacac caggagccctg aatgggggaaac gattctga gctacagta tggggattac agcgactct cggaccgccc tgtggactgc ctggatggcg cctgtccggc caltcgacccg ctgcgcgtgg ccccgctccc actgtatgcc gccatctcc tgggtgggggt gccggggcaat gccatgttgg cctgtgtggc tgggaaaggtg gccggccggga ggggtgggtgc caactgtgtg ctacccgg ccgtggccgga ttgtctgtgc tgtttgtc tgcctatct ggcatgtccc atggccgtg gaaggccactg gccgtatgtg gccatggggct gtccggcgct ggcctccatc atcctgtctga ccaltgtatgc cagcgtctgc ctccggcag ctctcagtc cgaactctgc ttccgtgtc tcgggctgc ctgtgtgtc acgtgtcagc gggcggtgcgg ggtgcaggtg gctgtggggc cagcctgggac actggcctg ctgtctatcc tgcctctgc calctaccg cgggtgtcac ccaggagacti ccaagccggc ctgcaggtg tgggtggaacta cggcggtctc tccagcaccg agaatgcgtt gactgtccalc cgggttcti ttgcttct gggggccctg gtggccgtgg ccagctgtcca cagtgtctc ctgtgtcggg cagcccgagc ctgcggccgg ctggggccag ccatgtgtgt ggggtttt gtctgtggg caocctacca cctgtgtggg ctgtgtgtc cgtgtggcgcc cccgaactgc gcaactctgg ccaaggccct gggggtgaa cccctatcg tgggctgtgc cctgtctac agctgtctca atccatgt ctccgtat ttgggtgggg ctcaactcg ccgtgtactg ccagctgcti gctactgggc cctgtggggg tccagggggc aggaacgaag tgtggacagc aagaaatcca ccagccaltga cctgtgtcgt ggaatggagg tgaagctgg agagacattg tgggtgtgta tctctatc tcatticaca agactgtgtt caggcatagc tggatccagg agctcaatga tgtctcat ttatctct cttatcaca cagalacca tcaltgacti gctatgtga aggccttiti aggcactaga gataagcag tgaacaaa agacacaaat cctggcc MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAFLVGV P PGNAMVAWVA GKVARRRVA TWLLHLAVAD LLCLSLPL AVPIARGGHW PYGAVGCRAL PSILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGFL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPM LFLYFGRAQLR RSLPAACHWA LRESQGDDES VDSKKSTSHD LVSEMEV atgtgtggcc ctgtgtct ggggtcagc ctgtgtgtc tctgtcaacc tgggaggggg gccccattgt gctgtcaca gcaactagg algaaggggg actatgtct ggggggggtg ttccctcgg gcgagggcca ggaagctggc ctccgcagcc gggacagcc cagcagccct gtgtgcacca ggtacagagg tgggacggcg tgggtcgggg tcaagggtgac caggtctggg gtgtctga gctggggccg aggtggccat ctgtgtgtct gtgtgtgtc aggttctct caaacggct gctgtggga ctggccaltga aaatggccgt ggaaggagatc aacaacaagt cggatctgt gcccggggctg cggctggggct acgactct tgatagctgc tgggagctg tgggtggcat gaagccagc ctaattgtc tgggcaaggc aggcagccgc gacatgcgg	Homo sapiens

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Homo sapiens

P

ENSP00000080

G Protein-

Coupled Receptor 322

LS190438

190438

593

594	190484	G Protein-Coupled Receptor Ls190484	LG95579	<p>AQDPVKPWQL LENMYNLTFH VGGLPLREDS SGNVDMMEYDL KLWVWQGSVP RLHDVGRFNG SLRTERLKIR WHITSDNQVRP QACAQKPVSR CSRQCQEGQV RRVKGFHSCC YDCVDCEAGS YRQNPDDIAC TFCGQDEWSP ERSTRCFRRR SRFLAWGEPA VLLLLLLSL ALGLVLAALG LFWHRDSPL VQASGGPLAC FGLVCLGLVC LSVLLFPGQP SPARCLAQQP LSHLPLTGCL STLFLQAAEI FVESELPLSW ADRLSGCLRG PWAWL VVLLA MLVEVALCTW YLVAFFPEVV TDWHMLPTEA LVHCRTRSWV SFGLAHATNA TLAFCLFLGT FLVRSQPGRY NRARGLTFAAM LAYFTTWVSF VPLLANVQVV LRPVAVQMGA LLLCVLGILAA FHLPRCYLLM RQGLNTPEF F</p>	Homo sapiens
595	190484	G Protein-Coupled Receptor Ls190484	ENSMRPT2619	<p>LG95579</p>	Homo sapiens
595	190484	G Protein-Coupled Receptor Ls190484	ENSMRPT2619	<p>MEADLGATGH RPRTELDDDED SYPOGGWDTV FLVALLLLGL PANGLMAWLA GSGARHGAGT RLALLLLSLA LSDFLFLAA AFQLEIRHG GHWPGLGTAA RFYFLWGVS YSSGLFLAA LSLDRCLLAL CPHWYPGHRP VRLPLWVCAG VWVLAFLFSV PWLVFPEAAV WYDYLVLCD FWDSEELSLR MLEVLGGLP FLLLVCHVL TQATACRTCH RQQPAACRG FARVARTILS AYVVLRLPYQ LAQLLYLAFI WDVYSGYLLW EALVYSDYLI LLNSCLSPFL CLMASADLRT LLRSVLSSFA AALCEERPGS FTFTEPTQL DSEGTLPPEP MAEAQSQMDP VAQPQVNPIL QPRSDPTAQ QLNPTAQPS DPTAQQLNL MAQPQSDSVA QPQADTNVQT PAPAASSVPS PCDEASPTPS SHPTPGALED PATPPASEGE SPSSTPPEAA PGAGP</p>	Homo sapiens

596	190595	G Protein- Coupled Receptor SH120	NM_016334		A	<p>agcaccctggg aanaaggcaga ccgctgtaggg gggccctggg cccagcgtg cgtggcctc ggggagtggg aagtggaggc aggagccctc ctacacctic gccatgaggt tcdgtagcga ctccagcacc atgattacct cccaataact atttttggg ttgggtggc ttttttcat gcgccaatg tttaagact atgagtagc tcaatggti gtacagggtg tctctccgt gacgtttgca tttcttgca ccaatgttga gctcalcat ttgaaatct taggaggtt gaatagcagc tccgttatt ttacttgga aatgaaacctg tgcgtaatc tgcgtacct ggtttcatg ggtccctttt acatggctga ttattgtg agcaatgac gactatgca taacaacagc cgtctttt ccgtctctt atggctgacc ttatgtatt tctcttgga actaggagat ccccttccca ttctacagcc aaaaacatggg atctatcca tagaagacct calcagccgg gttgtgtgga ttgggtgtgac tctcatggt cttcttctg gatttgggtc tgcacatgc ccatcacct acatgctta cttctcagg aatgtgactg acacagatatt tctgcccctg gaaaggcgagc tgcgtgcaaac catggatattg atcataagca aaaaagaaag gatggcaatg gcacggagaa caatgttcca gaaagggggaa gtcgcalaaca aacatcagg ttctggggga atgataaaaa ggtttaccac ttacgacatca ggaagtgtgaa atctactct tatcaacag gaaagtggag cttgggaaga attaagcagg cagcttttc tggaaacagc tgalctatatt gctaacagg ggaagaaaga alactocaaa accctcaagg ggaaatatt taatttcti ggttacttt tctctatt tctgtttgg aaaaatttca tggctaacat caaatgtt ttgaltcag ttgggaaac ggaatctgtc acaaggagca ttgagatcac tgtgaattat ctgggaatcc aatrtgatgt gaaagtttgg tcccaacaca ttctttcat tctgttggga ataatcagc tcaatccatg cagaaggatg ctgatactc ttacaaagt cttttatggc atcttagca gtatgctct caatgtatt gcttgcctat tagcacagat aatggggcag tactttgtc cctctgtgct gctgaltcca atgagtatgc ctttgaaata ccgcaaccata atcactgaa gcttgggaga acgtggatc aacttctac accgttgggt tgalgtatc ttccgtgca ggctctctc tagctatc ttctctatt tggctacaa acagggcacca ggaagagcaaa tggcaccttg aactaaagcc tactacagac tgttagggc cagtggttc aaaaattaga lataagagg gggaaaggg ggaagaaatg gaaacagggc ctgacattt ataaacaac aaaaigtat ggttagcatt ttaccttca tagctatc ctccctc aggtgtatct atgacctga gtatgcatcag ccagaacatg agaggagaa ctacactcaag acaatactca gcaggagagca tccgtgtgtc atatgggtc ggtgttaggg cgggagaggag ccaagaaact aaggtgtgaa aalacactgg aactcgtggg caagatcgt clatgtgtagc tgaagccaaac acgtggtt tccgtttaa ggttacaatg gaaaaggtta tagctttgc ttgagtga ctatataaa tcaagactg t MSFLDSSIM ITSQILFFG GWLFFMRQLF KDYEIRQYVV QVIFSVTFAF SCTMFELIIF P EILGVLNSSS RYFHWKMNLC VILLIL VFMV PFYGYFIVS NIRLHKQRL LFSCLL WLTF MYFFWKL GDP FPLSPKHGI LSIEQLISRV GVIGVTLMAL LSGFGAVNCP YTYMSYFLRN VTDIDILALE RLLQTMDMI ISKKKRMAMA RRTMFQKGEV HNKPSGFWM IKSVTTSASG SENLTIQOE VDALELSRQ LLETADLYA TKERIEYSKT FKGYFNFLG YFFSYCVWK IFMATINIVF DRVGKTDPTV RGIEITVNYL GIQFDVKFWS QHISFILVGI HVTISIRGLL ITLTKFFYAI SSSKSSNVIV LLLAQIMGMY FVSSVLLIRM SMPLEYRTII TEVLGELQFN FYHRWFDVIF LVSALESSILF LYLAKHQAPE KQMAP</p>	Homo sapiens
597	190595	G Protein- Coupled Receptor SH120	NP_057418.1		P	<p>aggctgcaagg cggcgctgctg tggagcgggg gcccggggccg cgcgcgagag atgtactcg gggcgaaaggc cagcttggagc gtcgcgctg cggggccggc ggggtcgaaat gttgtgtgca tcaagagaa agatagagagc tcaccaggtg ctaccctcc tctgtctt cgtatcacc tgggtggct cgaagagc cagcacatcc cgaagctgtg ggtgtgaaat ccttccatg tacgtgtccc tgtgtgacct ggaagccatc tggggcatg tgggtgaggg ggttggccggg gggggccccc tgalcacat gtctgtatg ctatctcc tgggtgggt gcccctatc aagggagagg agaaagagg cctgttggg ctccatttc tgttctct ggggaacccg gggcttttg ggtgtgaggt tgccttcat atccagaggg acgagaaat ctgctgtatc cgccgttcc tctggggcgt cctgttgc cttgtctt cctgtctgt gggccagggca tggcgccgtg ggaagctgtg ggggcatggc acggggcccg cgggcttggca gcttggggc cggcgctgt ggtgtatgt ggtgtcaagtc atcatgctg tggagtggt ggtgtcacc ggtgtgctg acacaaggcc agcttgcgoc tacgagocca tggactttgt gatggccctc</p>	Homo sapiens
598	190599	G Protein- Coupled Receptor GPRC5B	NM_016235		A	<p>aggctgcaagg cggcgctgctg tggagcgggg gcccggggccg cgcgcgagag atgtactcg gggcgaaaggc cagcttggagc gtcgcgctg cggggccggc ggggtcgaaat gttgtgtgca tcaagagaa agatagagagc tcaccaggtg ctaccctcc tctgtctt cgtatcacc tgggtggct cgaagagc cagcacatcc cgaagctgtg ggtgtgaaat ccttccatg tacgtgtccc tgtgtgacct ggaagccatc tggggcatg tgggtgaggg ggttggccggg gggggccccc tgalcacat gtctgtatg ctatctcc tgggtgggt gcccctatc aagggagagg agaaagagg cctgttggg ctccatttc tgttctct ggggaacccg gggcttttg ggtgtgaggt tgccttcat atccagaggg acgagaaat ctgctgtatc cgccgttcc tctggggcgt cctgttgc cttgtctt cctgtctgt gggccagggca tggcgccgtg ggaagctgtg ggggcatggc acggggcccg cgggcttggca gcttggggc cggcgctgt ggtgtatgt ggtgtcaagtc atcatgctg tggagtggt ggtgtcacc ggtgtgctg acacaaggcc agcttgcgoc tacgagocca tggactttgt gatggccctc</p>	Homo sapiens

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 MFVASERKMR AHQVLTFLLL FVITSVASEN ASTSRGCGLD LLPQVVS LCD P Homo sapiens  
 LDAIWGIVVE AVAGAGALIT LLLMLLLVR LPFIKEKEKK SPVGLHFLFL  
 LGTLGLFGLT FAFIQUDET ICSVRRFLWG VLFALCFSL LSQAWRVRL  
 VRHGTGPAGW QLVGLALCLM LVQVIAVEW LVLTVLRDTR PACAYEPMDF  
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 QENTPNYFDT SQPRMRETAF EEDVOLPRAY MENKAFMSDE HNAALRTAGF  
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599	190599	G Protein- Coupled Receptor GPC5B	NP_057319.1	P	Homo sapiens
600	190602	G Protein- Coupled Receptor GPCR150	NM_014373	A	Homo sapiens



601	190602	G Protein- Coupled Receptor GPCR150	NP_055188.1	<p>ttttacttiti ggtaaacatt tccattatati tgaattitgta ctttaagca ttaggttcac taataaccac atctgcctat  tactcaaat tatttcctti actaigtct ttttgacata tccagttic ctgacagcti gtaagatta ttgcctigaat ttictaaaa  caaccaagct ttacttaag tgcataaat tattttati ctttaacagta attttaatt ggatticagt cctigtctat gttttggggag  aaccagccat ctaccaaaagc ctgaaggcac agaatgctta ttctgctcac ttctcttct atgtcagcat tcaaggttac tggctgtcat  ttttcaggti gattgattta ttgttagcti tcaaacctg ttgggaagaa gttactacti tggtaaggc tatcaggata acttcttata  tgaatgaaac tatctatati ttctcttiti catccacac cagttaacti ttgaagata aaaaaatati ctatccaag ctatgtict  gttttctcag laccigtgta ccattigtac tacticaggti aatcattgti ttactaaag ttcaagattcc agcatatati ggaatgaala  ttccctgtti atactgtic aatagtittc ttatgtctac agtgtattgg tttaattgc acaagctaa tttaaaagac attgattac  ctttggatcc attgtcaac tgggaagtct gcttattcc acttaaat octaatcttg agcaaatga aagocctata tcaataatga  tttgttaata ttatnaata aaggttacag ctgtataag atcataatti tatgaacaga aagaactcag gacataatga aaaaataaact  gaactaaaaac aactttgcc ccttgactga tagattica gaaigticti ttgaaggcg tatccaggti attaaatagi gttttattt  aaaaacaaaa taattccaag aagttttat agtttticag ggacacata ttacaatat tacttgta ttacacaaa aagtgataag  agtttaacatt tggctatact gatgttttg ttactcaaa aaactactgg atgcaaacctg ttatgaat ctgaatttc actgacacat  ttaagatac aaactaaaaa ttattataa atgttcaaat gtaagcaaga aaaaaaaa</p> <p>MTALSSNCFS FQYQLRQTNQ PLDVNYLLFL ILGKILLNI LTLGMRKNT P Homo  CQNFMEYFCI SLAFVDLLLL VNISILYFR DFVLLSIRFT KYHICLFTQI ISFTYGFLHY sapiens  PVFLTACIDY CLNFSKTTKL SFKQCKLFYF FTVILWISV LAYVLGDPAL  YQSLKAQNAV SRHCPFYVSI QSYWLSFFMV MILFAFIC WEEVTTLVQA  IRITSYMNET ILYFPSSH S YTVRSKKIF LSKLIVCLS TWLPFVLLQV IIVLLKVQIP  AYIEMNPWL YFVNSFLIAT VYWFNCHKLN LKDIGLPLDP FVNWKCCFIP  LITPNLEQIE KPISIMIC</p>	
602	190623	Melanopsin	AF147788	<p>gggttccacc catcagaca cagcttcag ccaggacagc ttggcgagca gtagtcatag gtagacatctg gaggctgagg  cttccacgc gggcctctcg gctccattgg atggcaggcti ccggggcagac gtagctgtccag gtaggtgtgtgg gtagcaagg  tttggagcaa gtagcgccalg gggagcctcc ccagttgggac agaaagcacag gtagtgggggg gttggggccti gaggagatci  caggtgtacc cgcacaggcti gtaggtgacg gcccattggag aaaggacatt gtaggtggag acgtggggcti ccaaggccc  caggctgggg gttccgagtc ctgtatcti tccctgaggt gctctttga gggcctgtggc accctgggta tgtggattcc ggcctcalt  gtocacttga caagcacttc tccctggag tctgtgtcti gctccatcac ctgcaaccti tcttaattag caggttggag  agttggggctcc acattgaatg gtagctgtgtg ttgactcaga atgtctcca gctgtggaga atgttaaac cctatcata  aaacgcaagc agctgtgcat gtagcctaggg acagaaagaa aagccggccc ctacagctca cccggcccc aggggtggcct  ctgtggagcca aagccctgaa gtaggaagagc ctacggagaga agggcagctcg agccatgggc tggcagctcg aggaagta  gctccctc ccagtggagg tctccacti tctgtctc aaacctgggg ctccagagta actgtttgta aagactgggg  gaacttctgg aagggagatg atactctgt ccatccagg gctccaacac tccagcacti gttccagggac atggccccca  cttaggata ccgctggccc gtcgggctcc cctaaacgca gctctgtg gtagggcttag cccgagcagc cctcccttga  agccgtgtgt tcagttccc ttctccag ctctgtctg ctctcag acagggcag gggcagggccc ggggtccct  ccacttctga catcagta acttgatca gggcctgagc cctgggtgag ttctgggac ttctccaata aggttttaa aaactttat  actttaaaa ttctgtccg gcccagtgcc taccgtctgt aatcttggca ctttgggag ccgaggttggg ttggtacct  gaggtcagga gttcagagct agccctggcca acatgtgtgaa ctctgtctc ttctaatal acaaaaa ttggttggg  gtggcgaggt cctgtaatcc cagctactcg gtaggtctgag gtaggtgagat tgcctggacc tggggaggggg aagttcag  gagctgagat tgcacattg cactcaggg tgggtgacag agcagagctg ttcaaaaaa aataaaaaa aaaaaa  acttttat caaaaaa gcaaaagccg cctctgtatc ttgattcac atctctctt tgcctccatc ttgtgaaagg</p>	

[illegible]

[illegible]

[illegible]



sapiens	<p>GTWAAA WVPL PTVDPDHAH YTLGTVILLV GLTGMLGNLT VYTFCSRSL  L RTPANMEII NLA VSDFLMS FTQAPVFFTS SLYKQWLFGE TGCEFYAFCG  ALFGISSMIT LTAIALDRYL VITRPLATFG VASKRRAAFV LLGVWL YALA  WSLPFFGWS AYVPEGLTCS CSWDYMSFTP AVRATYMLLC CFVFFPLLI IYCYFIFR  AIRETRALQ TFGACKNGE SLWQRQLQS ECKMAKIMLL VILLFVLSWA  PYSVALVAF AGYAHVLTYPY MSSVPAVIAK ASAIHNPIY AITHPKYRVA  IAQHLPCLVV LLGVSRHR PPSYRSTHR STLSHTSNL SWISIRRRQE  SLGSESEVGW THMEAAAVWG AAQANGRSL YQGLEDLEA KAPPRPQGHE  AETPGKTKGL IPSQDPRM</p>	
Homo sapiens	<p>atggalacag gccccgacca gtoctacttc tccggcaatc acttggtcgt ctctcggg taccttctca cttocttggg ggggctcccc  ctcaacttc tggccctggt ggtctctg ggcaagctgc agcccgcccc ggtggccggg gacgtgcttc tgcataact  gaccgctcg gacctctc tgcctggt cctgcttc cgcattgggg aggcagccaa tggcagcac tggccctgc  ccttcaact ctgccactc tctgattca tctctcac caactatct ctaccgcc tctctggc agctgtagc attgaacgt  tctgaggt ggcocacca ctggtgata agacccggcc gggctgggg caggcaggc tggtaggt ggcctgctgg  ctgtggct ctgtcactc cagcgtggc tactatag aatctcagg ggaatctcc caccagccagg gcaccaatgg  gacctgctac ctggagttcc ggaaggacca gtagccatc ctctgccg tggccttga gattgctggt gctctttg  tggctccgt gatcatcacc agctactgt acagcgct ggtgggagc ctggcagag gggcagacca ccgccggcag  agagaggtgg cgggctgtt ggcggccag ctctcaact tcttctgt ctggggcc tacaacgtt cccatgctg  gggtatctc tggcgtgaa gccggcag ggaatctac gtagcgttc tcaacacct gaaacctgt gtcgacct  tgttacta ctctctcc tccgggtcc aagcgactt tcatgagctc ctgaggaggt tggtaggt ctggggccag  tggcagcagg agagcagcat ggaagctgag ggcagagagg gaggggagg gacggagcag ctgaagaaga  ggagaaatga aatgaatgg actatgact acagtcaata tgaactgac tgaataag aagatgtag agaattgca aaagtctcc  tccctgtat cctcaata gttttgca ttgacttc aggcattcc atgtgtagtg caattatgc ctattacag aaacagagna  ccaaacata tggatcct ctgatttg ctgagcaga ttactctt ctattctc tgcctttg ggcgtgta gcaattcag  gggtggttt agggaaaaa atgtgcaaaa taactcag ctgtacaca cttaacttg tcttggaa gcaatttc gctgtatca  gcatagacag atattggca gtaactaag tccacagcca atcaggagtg ggaataacct gctggatcat ctgttctg  gctgtgag ctgccatct gctgagcata cccagcttg tttttatc agtaatgac aatgtatgt gcatcccat ttccccgc  tacctaggaa catcaatga agcattgatt caatgtctag agatctgat tggatttga gtaccttc ttatttgg ggtgtgctac  ttttacacag caaggacact catgaagatg ccaaacatla aaatcttc accctaaaa gttctgctca cagctgatt agtttcat  gtactcaac tgccttataa catgtcaag ttctgcccag ccataagat catctactc ctatcacca gctgcaacat  ggagcaaacgc atggacatcg ccatocaagt cacagaagc atcgactct ttacagctg cctcaacca atccttatg</p>	<p>604 190627 G Protein-Coupled Receptor GPR41 &amp; GPR42 NM_005304</p>
Homo sapiens	<p>MDTGPDSYF SGNHWFVSF YLLTFLVGLP LNLLALVVFV GKLRPPVAV  DVLLNLNTAS DLLLLFLPF RMVEAANGMH WPLPFLCPL SGFIFFITTY  LTALFLAAS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSVV  YVIEFSGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVVP LIIT  SYCYSRLVWILGRGGSHRRQ RRVAGLLAAT LLNFLVCFGP YNVSHVVGVI  CGESPAWRIY VTLSTLNSC VDPFVYFSS SGFQADFHEL LRRLCGLWQG  WQQESSMELK EQKGGEEQRA DRPAERKTSE HSQCGCTGGQ VACAES</p>	<p>605 190627 G Protein-Coupled Receptor GPR41 &amp; GPR42 NP_005295.1</p>
Homo sapiens	<p>caagactgt cctcttgc gactacaaca gattggagcc atggcttgg agcagaacca gtcaacagat tattattag  aggaaaatga aatgaatgg actatgact acagtcaata tgaactgac tgaataag aagatgtag agaattgca aaagtctcc  tccctgtat cctcaata gttttgca ttgacttc aggcattcc atgtgtagtg caattatgc ctattacag aaacagagna  ccaaacata tggatcct ctgatttg ctgagcaga ttactctt ctattctc tgcctttg ggcgtgta gcaattcag  gggtggttt agggaaaaa atgtgcaaaa taactcag ctgtacaca cttaacttg tcttggaa gcaatttc gctgtatca  gcatagacag atattggca gtaactaag tccacagcca atcaggagtg ggaataacct gctggatcat ctgttctg  gctgtgag ctgccatct gctgagcata cccagcttg tttttatc agtaatgac aatgtatgt gcatcccat ttccccgc  tacctaggaa catcaatga agcattgatt caatgtctag agatctgat tggatttga gtaccttc ttatttgg ggtgtgctac  ttttacacag caaggacact catgaagatg ccaaacatla aaatcttc accctaaaa gttctgctca cagctgatt agtttcat  gtactcaac tgccttataa catgtcaag ttctgcccag ccataagat catctactc ctatcacca gctgcaacat  ggagcaaacgc atggacatcg ccatocaagt cacagaagc atcgactct ttacagctg cctcaacca atccttatg</p>	<p>606 190701 C-C Chemokine Receptor 11 NM_016557</p>

607	190701	C-C Chemokine Receptor 11	NP_057641.1	<p>                     ttttttggg agcatcttc aaaaacttac ttatgaagaat ggccaagaaa tatgggtctt ggagaagaca gagacaaagt                      gggagagagt ttcttttga ttctggaggt octacagagc caaccagtag tttagcat taagggtaaa actgctctgc ctttggctg                      galacataig aatgaigctt lccctcaaa taanaacatc gcatattct gaaactcaaa tctcagagcg cgggttgga actataata                      aagaatgggt tgggggaggg gggagaaata aagccaaga agaggaaca agataataa tgracaanaa algaataa                      aaatgaaca ttaggttgaat aggcataagt gaataacat ctgctgaac gaagaagc tttgttga taatttga                      tcttggctg agtgggtctt atacaact acacagtg taataagc cagaactata tacacatt gacacatt caattctg                      gtttgcatt tatagtata ttatgaaga tggaccatt ggggaaaaact ggggtgaaggg taocagagc cactctgac cacttga                      acttctctg aattttaat aatttcaaa taanaacat taanaaaaaa cccactatg tataagttag gccatcaaa acagtatt                      aagagggtc agttaaaag gcatataaa ttatttaa ttatlaagt ttatacaa gaagattc cctgcataa tttagact                      gaataagat gcagcagaac tcaactatc tttttctg ttttttaa atttgaagt aattttaa aatcaactc ctcaaaaaa                      gcaataaaaa aaaaacaaac tataaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa                      aaaa                 </p>	P	Homo sapiens
608	190705	G Protein- Coupled Receptor SALPR	NM_016568	<p>                     MALEQNQSTD YYEENEMNG TYDYSQYELI CIKEDVREFA KVFLPVFLTI                      VFVIGLAGNS MVVAIYAYYK KQRTKTDVYI LNLAVADLLL LFTLPFWAVN                      AVHGWLKGI MCKITSALYT LNFVSGMQFL ACISIDRYVA VTKVPSQSGV                      GKPCWIIFC VWMAALLSI PQLVFYTVND NARCIPIPR YLGTSMKALI QMLEICIGFV                      VPFLIMGVCY FITARTLMKM PNKISRPLK VLLTVVIVFI VTQLPYNIVK FCRAIDIYS                      LITSCNMSKR MDIAIQVTES IALFHSLNP ILYVFMGASF KNYVMKVAKK                      YGSWRQRQS VEEFPDSEG PTEPTSTFSI                      gatttggga gttatggcc agtggccag tgaacgggg acagggagag gggaagcttg cgttgatcat aaggaactag                      ggaactccgag ctggccgga gaaccttgg agcgcgagtg ctggcttac gggctgcat cctcaactc gctccaagc                      agccgctgag ctaactct g-gtccaagg cgttgcctgc ggcagagag ggccttagta ccagttctt gggctctctc                      tttagtagt gctttgaag ctccaagca gttcccgca gttacgcttg caaaaaact ggggttaaac gttttatct                      aggtctgic cccaagaca tgaactagag gtacctgag algcagalg cgttggaggg cggccaacac gtagtgaac                      aggcagcagg cggggagacaag cttagcagaac tcttagctt ggtccgggac ctttggaggg cggccaacac gtagtgaac                      gctgctgc agcttccgga ctttgggttg gtagctggggg tggagttggc tggagttggc cggccaagac atccccggg                      cagcggcggg gcaagaggg cgggacaga gggccgggg cgggalttca tgaagttgt gtagctgggt gtagctgggt gtagctgggt                      tgggggtgag gggcaactc ctggttctt acctgagaa gtagcagag ggtcggggc agtctctat caactctc                      gtcaccaac tggcgctgag gtagctttag ttgtgctca ccttggctt cgttggggg gtagaacgtc ttgactca                      atggcccttc ggcagggcca tttgttagat cttgtttag gtagctgtag tgaacalgta cggccaagctg ttcttctca                      ctgtccatgag tttgagcggc taactatgg tggcttggc tctgaagag caaccggacc gtaggacagc cgggggggac                      tgttggggc gtagcgttgg gtagcgttgc tcttctgg ccaaggcgtt gttgtgttg alcttgggtt tggcggtct                      gggctcgtg cccagtgcca ttcttccac caggttcaag gttgtgttg cgttgggtt ccttgggtt ttccgggaca                      agtttgggg cggcgacagc cagttctggc tgggtcttca ccaactggc aaggttgggt tgggttctg gcttgggtt                      ggcaltalia tcttggctia ccttctgct gttggcttca tggcggtc cggcggtc ggggacaaag gtagggggc                      gtagggcggg gtagggggc cggggggc gggggggc gggggggc gggggggc gggggggc gggggggc                      ccttctct gtttggctg cccaagag cgttccac cttggagcalt ctaactagt tcaagcgggt ggcctttagc                      caggagattt tcttggcca gttatagcgt ttcccttga gcttgggtt agcgttctt aacagcttggc tcaacccgt                      ccttctatgc ctgttgggc gtaggttccg caagggtc aaggttgggt ttttgggtt cgttcttct tggatcaca                      gtagggccc cttaacggc actaagc cggagcagca gtagggggc ctgaaggcc cggcggtggc ccaagggg                 </p>	A	Homo sapiens

Homo  
sapiens

P

NP\_057652.1

G Protein-  
Coupled Receptor  
SALPR

190705

609

ggggagccgg acctgtctta ctaccacct ggcgtctgtg tctacagcgg gggcgctctac gacctgtctg ccagcagctc  
tgcctactga cgcaggcttc aggccagggg cgcgcgcgtc gggcaagggt gctctcccg ggcggtaaaag aggtgaaagg  
atgaaggagg gctgggg  
MQMADAATIA TMNKAAGGDK LAELFSLVPD LLEAANTSGN ASLQLPDLWW  
ELGLELPGDA PPCHPPSGG AESADTEARV RILISVYVW VCALGLAGNL  
LVLYLMKSMQ GWRKSSINLF VTNLAL.TDFQ FVLTLFWAV ENALDFKWWF  
GKAMCKIVSM VTSNMVYASV FFLTAMSVTR YHSVASALKS HRTRGHGRGD  
CCGRSLGDS CFSAKALCVW IWALAALASL PSAFSTTVK VMGEELCLVR  
FPDKLLGRDR QFWLGLYHSQ KVLGFLVPL GIILCYLLL VRFIADRRAA  
GTKGGA AVAG GRPTGASARR LSKVTKSVTI VVLSFFLCWL PNQALTTWSI  
LIKFNAPFS QEYFLCQVYA FVSVCLAH NSCLNPVLYC LVRREFRKAL  
KSLWRIASP SITSMRPFTA TTKPEHEDQG LQAPAPPHAA AEPDLLYYPP  
GVVYSGGRY DLLPSSAY

Homo  
sapiens

A

NM\_018970

G Protein-  
Coupled Receptor  
GPR85 (SREB2)

190711

610

ggcacagga ttatctgt gttcagat cagattata ctgtagagaa gattttat tttgttca ttacagat attataagc  
aaaaagcalt gagaanaaga agcagacgt ttacattggg aataaigaa agcgtgtctg ctagtgttg gtaggagaa  
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611	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NP_061843.1	<p>ataccattt cctcatctac tagtaagatt gctagcatg aactgtaata tgggtttt gttgattgg tataaagtt ttcaattca  ttaatattt acaaatgcta gatattggc tgggaaggcaa cattaatgg accagctgt cacaactgag cagttctaat aalgcagaat  aaatacatgt tgccttaaaag ggtaictag tatccttcat cttaattag actggagcaa atagccaagg gaaatcaaat cagtaactgg  tcalggicat gcatiaaaa gtcagggaa gataattat tactttcc ttntttc acatgggttg aaactaaag tgcatacac  tgaataatg agattttct ctacgggtg ctaccttc taaactgic taagaagcag gcatgtag taltgttata tttaagtca  gctgcaagg ggaaccaca gccctagat gacatctgt acatttgg aagcaattat tctactgag gcacagtctt gttatatt  tctgcacatt cagggtattg gtaattaaa ttattcagt ttaactgt gaaagcttat attatgatt ctggatttt agaaatacat  tagagtcgt gagtcatt cttaagata cagatgtg aactcaaa taaagtigca ttgccaataa ttaccocgg lagcctgtta  atttctga aataagttt acattttgg cacatacaa cgtttttt aattgggag gcaagcaca actaggaga ctactttat  tatggtttg cttttgatt ctgtagcta ctatcca gactggaat gtaagaaga taatcaaat aatgctgata aactgacata  atatatctg taaaagcatt atttggagt ttatataat catcctcta ttattctaa algccagtag tattagaga tgtgtacctg  ctagttaat tggctcagaa tttaataa aacatacac tttaattgg agcatagiac catagaaat tggggcttca aataacac  ttgtaagaag aatggttac actaacatta tgaacaaact agaaaaagt attattttg ttgcttct gttgtttg ttatggttg  gttttgg agttattt ttnttgg ttgataat aagattaga actataac acagaattc atattgctat agtactctg  taaagaat atcaataa ataaagaaa taatcaatg aaatttca atgtaaaa aaaaaaaa aaaa  MANYSHAADN ILQNLSP LTA FLKLTSLGFI IGVSVVGNNLL ISILL VKDKT  LHRAPYYFL DLCCSDILRS AICPFVFNK VKNGSTWTYG TLTKKVIAFL  GVLSCFHTAF MLFCISVTRY LAIAHHRFT KRLTFWTCLA VICMVWTLV  AMAFPVLDV GTYSFIREED QCTFQHRFR ANDSLGFMLL LALLLATQL  VYLKLIFFVH DRRKMKPVQF VAAVSNQWTF HGPAGSQAA ANWLAGFGRG  PTPTLLGIR QNANTTGRRL LLVLDEFKME KRISRMFYIM TFLFLTLWGP  YLVACYWRVF ARGPVVPGGF LTAAVWMSFA QAGINPFVCI FSNRELRRCF  STTL YCRKS RLPREPYCVI</p>	P	Homo sapiens
612	190725	G Protein- Coupled Receptor GPR26	LG93120	<p>aggtagtgg agctcttc caeggtccc ateggtccc actgggggggt gctgtccaag tgcctgggt acagcaaggc  cgatccgac cctttgt actcttact ggcacacacag taccgcaaaa gcigcaagg gattctgaac aggtctctgc  acagagctc catccatcc tctggctca caggcgactc tcaagccag aacattctgc cgggtctga g  MNSWDAGLAG LLVGTMGVSL LSNAL VLLCL LHSADIRROA PALFTLNLTC  GNLLCTVNM PLTLAGVVAR QPAGDRLCR LAFLDTFLA ANSMLSMAAL  SIDRWVA VVF PLSYRAKMLR RDAALMVAYT WLHALTFPA ALALS WLGFH  QLYASCTLCS RRPDERLRA VFTGAFHALS FLLSFVVLCC TYLKVARFHC  KRIDVITMQT LVLVDLHPS VRERCLEEQ RRRQRATKKI STFIGTFLVC  FAPYVITRLV ELFSTVPIGS HWGVLSKCLA YSKAASDPFV YSLLRHQYRK  SCKEILNRLL HRRSIHSSGL TGDSSHQNIL PVSE</p>	A	Homo sapiens
613	190725	G Protein- Coupled Receptor GPR26	LR26	<p>actgtctggga ctgattatgt gcgtgagctt ggcggggtaac gccattctgt cctgtctgtt gctcaaggag cgtgccctgc  acaaggctcc ttactctc ctgtctggacc tttgctctggc cgaatggcata cgtctctgccc tctgtctccc ctgtctctgc gctctctgc  ggacggctc ttcatggacc ttcatggcac tcaatggca gatttggccc ttatggccc tctcttttg ctccatggc gctctcatgc  tgttctgcat cagcgtcac ccgtacatgg ccatggoca ccacgcttc taccgcaagc gcatgacact ctggacatgc  gcggctgtca tctgcatggc ctggacccctg tctgtggcca tggccctccc acctgtctt gacgtgggca cctacaagt  tattcgggag gaggaccagt gcatcttga gcatcgctac ttcaaggcca atgacagctt gggctctcatg ctatgttgg ctgtgtctcat</p>	P	Homo sapiens
614	190741	Sreb3	NM_018969	<p>atggccaaca ctacggaga gcttagagag gtagcggcg cctgtccc accgtccgca tcaatgag tgaagctgtt  actgtctggga ctgattatgt gcgtgagctt ggcggggtaac gccattctgt cctgtctgtt gctcaaggag cgtgccctgc  acaaggctcc ttactctc ctgtctggacc tttgctctggc cgaatggcata cgtctctgccc tctgtctccc ctgtctctgc gctctctgc  ggacggctc ttcatggacc ttcatggcac tcaatggca gatttggccc ttatggccc tctcttttg ctccatggc gctctcatgc  tgttctgcat cagcgtcac ccgtacatgg ccatggoca ccacgcttc taccgcaagc gcatgacact ctggacatgc  gcggctgtca tctgcatggc ctggacccctg tctgtggcca tggccctccc acctgtctt gacgtgggca cctacaagt  tattcgggag gaggaccagt gcatcttga gcatcgctac ttcaaggcca atgacagctt gggctctcatg ctatgttgg ctgtgtctcat</p>	A	Homo sapiens

615	190741	Sreb3	NP_061842.1	P	Homo sapiens	<p>ggcagctacc catgctgct accggcaagct gctctcttc gattatgct accgcaagat gaagocagtg cagatggctg cagccalcag ccagaaactgg acaltccatg gtccgggggc caccggccag gctctgcca actggatgc cggcttggc cgttggcca tgcaccaac ccgtctgggt atccggcaga atgggcatgc agccagccgg cggctacttg gcatggcaga ggtcaagggt gaaaagcagc tgggocgcat gttctacgc atcacatgc tcttctgt cctctggtca cctatcag tggctgcta cttggcagtg ttgtgaaag cctgtgct gtccaccgc taactggcca cttgtgttg gattgacttc gccaagctg ccgtcaacc aattgtctg ttctgtcta acaaggacct caagaagtgc ctgaggactc accgccccctg ctggggcaca ggaggctgc ccgtcccg agaaacctac tgtgtcat ga</p> <p>MANNTGEPEE VSGALSPSA SAYVKLVLLG LIMCVSLAGN AILSLVLKE</p> <p>RALHKAPYYF LLDLCLADGI RSAVCFPFVL ASVRHGSSWT FSALSKIVA</p> <p>FMAVLFCFHA AFMLFCISVT RYMAIAHHRF YAKRMTLWTC AAVICMAWTL</p> <p>SVAMAFPPVF DVGTYKFIRE EDQCFEHRF FKANDTLGFM LMLAVLMAAT</p> <p>HAVYGKLLLF EYHRKMKPV QMVPALSNQW TFHGPATGQ AAANWIAFG</p> <p>RGPMPTLLG IRQNGHAASR RLLGMDEVKG EKQLGRMFYA ITLFLLLWS</p> <p>PYIVACYWRV FVKACAVPHR YLATAVVMSF AQAAVNPIVC FLNKLKDKK</p> <p>LRTHAPCWGT GGAPAPREPY CVM</p>
616	190742	G Protein-Coupled Receptor H7TBA62	E32367	A	Unidentified	<p>gggtctgct cagagactag agcagggaag ggggggaaag cggcgataga ggttagcagg aatgttaat taicaggagc aggtactg cagagactag gccaggctcc acacaggccc tcataggccc aggtgtcca gttggggagga aacagggaag tggacttcc tctcttct cctctctgc tctagcttc aaggctatg cttgtgagt gaattccaac cttgtttagt tggcactgt ccttgggcat ggtaagacc tctcagtaac cttctgcac aaacaccca aacttctct ttgaataat altcataaa atgtctatt cacatgtatt cttcatg alcaigccc tctgtgaaag cagactaac tgaataatt aagcagaaga acaaggcttag gggagtaaa taacttccc agtcaacagg ctatgtgca gcaaggcttg gactccgag ccctcgctt ttctcttt ggaacccat gctgtaatccc tgcctatg ccaactcca ggcctctg ttggggccc aaggggaaac ttittgaga ggaaggagag cttgtcacg ttaggaaag agggagctct agtttggtc ctgtcatc ttggagaggg aaactccag cttctcct gggttggag cttggggctg cctccatag cgggggtaact ctcccttc cctctctct ctgocattta gaggccctct tacaaggcgg cgtatgaca tataccctg cattcagct gttgctcggc ctggcccacc taccaccaat ctggaccaac aggaaggttg tgggttggc ttccacac cctcctctg aggtgtgggg gttggggcagg gctcaccaaga gggccagag aagcacttaa ttctacagc ttctcttag agccttcagt gggctctgccc agtctggag acactggag acctcttc ttagcaccac caatctga tggcttggga tggccact caatctct gctctccac ccacttct ctggggccat gctccggag gcagttggct gattgtctgat gatgtccga tggctgtcaa attctagcc ctgaggctca tggttggcc ttgggtatggg cttgtggggg ccattggctt gcttgggaaat ttggcgggtg ttgtgggtat gattaaact gcccggagag cccctggccc acctcagac acctcgtct tcaacttggc tctgggggag cttggggagag cactcact ccccttgg gcaagccggagt cggcacttga cttcacttg ccttcggag gttgoccttg caagatgggt ttgacggcca ctgtctcaa cgttctatggc agcatttcc tcalcagc gcttggagct gctcgtact gggttgggtggc catgtctggc gggtccagagcca ccaactctc actctctg gcccggaaatag ccaacttggc agtttggggc gctcgtcggc ttggttgggt gttccacagt gttctggggg tggaggggtga gttgttgggt gttgctgctt gcttctggc ttccccaag aggttacttggc tggggggctta ccagcttggc aggttgggtg tgggtttcat gttgoccttg gggttcatca ccaacagcta cctgtctgct ctggoccttcc tgcagcggc gcaacggcgg cggcagggct gttgggttctt gttgggttctt gttgggttctt ctttctct tgtgtttc ccaacatgt gtttacttc tgggttgggt tgggttgggt tgggttgggt ccttggaaac gttacttca tactatcag acgtatgtct tccctgtcac tacttggct gtcacacaga ataggcttgg ctaacttggc tcttgggtg tcttgggtg gggggggc caggctctgg caggccacctt caggggatctg cgggtcggggc tgggttggagc tgggttggagc aggttggccct</p>

617	190742	G Protein-Coupled Receptor H7TBA62	ENSP00000201 359	<p> aaaagcaggta agcaggcggg aggcggcagg caaccccccgg agagagccggc ctctacccct gctcaccac ctagcaggag  ggacacccgg gtagagggcg caagctgaa acactctct tcttgagatc caccagaggt agggatccgt agtccggggg  agagagctggc ctctggcca agctggcagg cctcaggagg aagagctgta tcttgatcc ccaactctgg gtaggggta  tggggggagg agggggctcag atcaggctc gtagggagaa agctaaagaa agctaaagaa aggggggagg aggggggagg  agagaaagaa ctctgggta tccaaagt gcttgacct ttatcccg ttacccag agtccagat agagaaagag gtaggggag  tccattctg cttagcagg aatactagg aaaaatcc taagggttct agggctatag atcaggagggt agggcccatc tctctgta  ccacccccc acctcaaac aggggagctc ttgcttct cgggtatcaa agggcaaaaat ggccaggctcc cctgctccta  ccttaaccatc taggggta cactgaaac ttgctggctc caggagccct agctggcaaaa gctggtagtc cctgagggg  atggcagggt ggggggtatg ctgggaattc cagcaccctc caggccctgg gtagggcctgg gtagggcctc cggggggg  tgggtctc cctcaaac aggggttaga agagggtaga ataatgacaa gtaggggaa tggggggggg gtaggggggg  aggggagaa agaggggggg gggggggg aacaggctc agggtagaggg agaaagggcag aggtaccaga agggggggt  aggtccctt ggcccaaatg caaaggccag agtatcaat tggggtag aggaacctgga ttacagctt taccagc aatattctt  acctttgt acctactgt tctcaactg aaaaagggt actaaagat taacaggtaa atactgtt agctattt ctgttgt  tgggttg ttgagagag agtctgctc ttgcccag gctggcag aggggggag aggggggag tctcagctc ctgcaacct cgtcccg  gttagagga ttctctggc tccagctcc gtaggtctgg gtagtagctgg gtagtagagc tccggctacc atgctggc aattttgt aattttat  agagagagga ttacacata ttggccaggc tgggtcaca ctctgacct ctatgtat gcccacctc gcccacctc gcccacctc  gtgtggagt taccggcgg agccacggca cccggctcag ctatttct taccacctgt gtaggggag gtaggggag gtaggggag  tgggggggaa taaggctgca ctggggag gggggggg aacctgtc cagctggagat ggttgtagat gctggagat  gggggtat gtaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc  ggttctct tgggtctgt attgagag atcaatgaa aagggtagc atcaggagga ttcttagga gggcagccct  agaaaggagg agggcagg gtagggtagg tagagctc  MPTLNTSASP PTFWANASG GSVLSADDAP MPVKFLALRL MVALAYGLVG  AIGLLGNLAV LWVLSNCARR APGPSDTFV FNALADLGL ALTLFWAAE  SALDFHWPFQ GALCKMVLTA TVLNVSASF LITALSARY WVVMAAGPG  THLSLFWARI ATLA VWAAAA LVTVPTAVFG VEGEVCGVRL CLLRFPSPYV  LGAYQLQRVV LAFMVPLGVI TTSYLLLLAF LQRRQRRQD SRVVARSVRI  LVASFFLCWF PNHVVLWGV LVKFDLVPWN STFYTIQTVV FPVTCLASH  NSCLNPVLYC LLRREPRQAL AGTRDLRLR LWPQGGGWVQ QVALKQ  atgtagaagg actgcatcga gtagcagg gtagcttt tctctgta cggcaggagg ctaggggga tcatgga  gtccctggcc atactggca tgggggag aattctgta cttagcat tcttctt ctagggag atccagact gtagcagg  gtaggtctt cccaccag tcttctt ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc  aactggcc gtaggtct tcttctt gtaggtct tcttctt tcttctt tcttctt tcttctt tcttctt tcttctt tcttctt  gtaggtct tcttctt tcttctt gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  tgggtctc atcagagca gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  ccttctct atggccctca cacttctt ctagggag ctaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  gtaggtct tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc  agggcagg gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  gtaggtct tcttctc atcagagca gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  caggtctcaa gtaggtct aggggtct ctagggag gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  atgggtct ctaggtct atccacaca aggggtct atccacaca aggggtct atccacaca aggggtct atccacaca aggggtct </p>	P	Homo sapiens
618	190743	G Protein-Coupled Receptor GPRC5D	NM_018654	<p> aaaagcaggta agcaggcggg aggcggcagg caaccccccgg agagagccggc ctctacccct gctcaccac ctagcaggag  ggacacccgg gtagagggcg caagctgaa acactctct tcttgagatc caccagaggt agggatccgt agtccggggg  agagagctggc ctctggcca agctggcagg cctcaggagg aagagctgta tcttgatcc ccaactctgg gtaggggta  tggggggagg agggggctcag atcaggctc gtagggagaa agctaaagaa agctaaagaa aggggggagg aggggggagg  agagaaagaa ctctgggta tccaaagt gcttgacct ttatcccg ttacccag agtccagat agagaaagag gtaggggag  tccattctg cttagcagg aatactagg aaaaatcc taagggttct agggctatag atcaggagggt agggcccatc tctctgta  ccacccccc acctcaaac aggggagctc ttgcttct cgggtatcaa agggcaaaaat ggccaggctcc cctgctccta  ccttaaccatc taggggta cactgaaac ttgctggctc caggagccct agctggcaaaa gctggtagtc cctgagggg  atggcagggt ggggggtatg ctgggaattc cagcaccctc caggccctgg gtagggcctgg gtagggcctc cggggggg  tgggtctc cctcaaac aggggttaga agagggtaga ataatgacaa gtaggggaa tggggggggg gtaggggggg  aggggagaa agaggggggg gggggggg aacaggctc agggtagaggg agaaagggcag aggtaccaga agggggggt  aggtccctt ggcccaaatg caaaggccag agtatcaat tggggtag aggaacctgga ttacagctt taccagc aatattctt  acctttgt acctactgt tctcaactg aaaaagggt actaaagat taacaggtaa atactgtt agctattt ctgttgt  tgggttg ttgagagag agtctgctc ttgcccag gctggcag aggggggag aggggggag tctcagctc ctgcaacct cgtcccg  gttagagga ttctctggc tccagctcc gtaggtctgg gtagtagctgg gtagtagagc tccggctacc atgctggc aattttgt aattttat  agagagagga ttacacata ttggccaggc tgggtcaca ctctgacct ctatgtat gcccacctc gcccacctc gcccacctc  gtgtggagt taccggcgg agccacggca cccggctcag ctatttct taccacctgt gtaggggag gtaggggag gtaggggag  tgggggggaa taaggctgca ctggggag gggggggg aacctgtc cagctggagat ggttgtagat gctggagat  gggggtat gtaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc  ggttctct tgggtctgt attgagag atcaatgaa aagggtagc atcaggagga ttcttagga gggcagccct  agaaaggagg agggcagg gtagggtagg tagagctc  MPTLNTSASP PTFWANASG GSVLSADDAP MPVKFLALRL MVALAYGLVG  AIGLLGNLAV LWVLSNCARR APGPSDTFV FNALADLGL ALTLFWAAE  SALDFHWPFQ GALCKMVLTA TVLNVSASF LITALSARY WVVMAAGPG  THLSLFWARI ATLA VWAAAA LVTVPTAVFG VEGEVCGVRL CLLRFPSPYV  LGAYQLQRVV LAFMVPLGVI TTSYLLLLAF LQRRQRRQD SRVVARSVRI  LVASFFLCWF PNHVVLWGV LVKFDLVPWN STFYTIQTVV FPVTCLASH  NSCLNPVLYC LLRREPRQAL AGTRDLRLR LWPQGGGWVQ QVALKQ  atgtagaagg actgcatcga gtagcagg gtagcttt tctctgta cggcaggagg ctaggggga tcatgga  gtccctggcc atactggca tgggggag aattctgta cttagcat tcttctt ctagggag atccagact gtagcagg  gtaggtctt cccaccag tcttctt ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc ctaggtc  aactggcc gtaggtct tcttctt gtaggtct tcttctt tcttctt tcttctt tcttctt tcttctt tcttctt  gtaggtct tcttctt tcttctt gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  tgggtctc atcagagca gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  ccttctct atggccctca cacttctt ctagggag ctaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  gtaggtct tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc tcttctc  agggcagg gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  gtaggtct tcttctc atcagagca gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  caggtctcaa gtaggtct aggggtct ctagggag gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct gtaggtct  atgggtct ctaggtct atccacaca aggggtct atccacaca aggggtct atccacaca aggggtct atccacaca aggggtct </p>	A	Homo sapiens

619	190743	G Protein- Coupled Receptor GPCR5D	NP_061124.1	gatcaggag gagataaa MYKDCIESTG DYFLLCD AEG PWGIIIESLA ILGIVVTILL LLAFLFLMRK IQDCSQWNVL PTQLLFLLSV LGLFGLAF AF IELNQQTAP VRYFLFGVLF ALCFSCLLAH ASNLVKLVRG CVSFSWTTIL CIAIGCSLLQ IIAITEYVTL IMTRGMFVN MTPCQLNVDF VVLLVYVFLF MALTFVSKA TFCGPENWK QHGRLLFITV LFSIIWVW ISMLLRGNPQ FQRQPQWDDP VVCIALVTNA WVFLLLYIVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENQELSRAR DSDGAEDVA L TSYGTPIQP QTVDPTECF IPQAKLSPQQ DAGGV cgggcaaggcg ggggaactcc ctgaagagcg ccttggtcac agcaccttg aagacagcca tgggccatgg ggaocaaacc agagcctggc ctggggagcca ggaaggacat ccacaaagcc ttgggtgagt ggcctgggact ggcctctctt cgttccag gggcttgggc ccaggggccat gtccacaccg gctgcagacca aggcctcaac cccctgtact acaacctgtg tgaacctct ggggcgtggg gcatcgctct ggagggcgcg gctggggcgcg gcatgttcac cactgttg ctacacatca tcttggggc cagcctccc ttgtgcagg acaccaaagaa acggagcccg ctgggggacc aggtatctt ccttgggg accctgggc tctctgct cgtgttgcc tgtgtgtga agcccgact ctacacctgt ggcctcggc gctctctt tgggggtctg ttgccatct gtctcttg tctggcgct cactgttg cctcaact cctggccgg agaaacacag ggcgccgggg ctgggtgac ttacgtgg ctctgtct gacctgtga gagggtcatca tcaatcacaga ggtgtgtgac atcacctcgg ttggggcgag tggcgaggcg ggcctcagc gcaacagcag cgcaggctgg ggcgtggcct cccctgtgc cgtgcgcaac atggacttg tcatggcact catctacgtc atgtctgtc tgcgtggcg ctcttgggg ggcctggcccg cctgtgtgg ccgtacaag cgtggcgta agcatgggg ctgtgtc ctacacacag ccacctcgt tgcataagg ggtgtgtgga tctgtgta tactacgc aacaagcagc acaacagtcc cactgggat gacccacgc tggccatgc cctggccgc aatgcctggg cctgtct ctctacgc atcccgagg tctccagggt gaccagttcc agccacagagc aaagtaccca ggggggacag tacccacc gggcggtggg ctatgagac atcctgaag agcagaaggg tcaagagcatg ttctgtggaga acaaggcctt ttcatggat gaggcggtg cagctaaag ggcgggtgtca ccaatcagcg ggtacatagg gcaactgtg accagtgt accagccac tgaatggcc ctgatgaca agttccgtc cgaaggagct taagacatca tctccacag ggcacggccac aacagcagg tgaatggcg tgcacactcg accctggcg ctgaagacat gtactggcc cagaagccac agggagaggc accgcccgaag gacggcaaga actctcaggt cttaagaac cctacgtgt gggagctgagt cagcggggc gaggagaggc ggggggaatt ggggagggcc ctgaaggact ggcggcgccg aagggaact ccaaggctct cctccctcg gcaggccagc aacatgtgc ccagatctgg aaggggctcc ctctgtcca ggtgttggt ggggtgtcag ggtgtccca cccactcc agtgtgtg ggtcgaaga gccaaccca ggcctcgc agatcact cggcggtcac actccagcca aatagtgtc tcgggggtg gctggcgag cgctatgt tctctgaga ttctgcaac ctcaagagac ttccagggcg ctcaaggcctg gatctgtc ctgtgagg aacaagggt cctaataaat acaattctg ttaataaa aaaaaaaa aaaa MGTPPEPLG ARMAHKALV MCLGLPLFLF PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGIVTTFVL ILVASLPFV QDTKKRSLG TQVFFLLGTL GLFLVFACV VKPDFSTCAS RRFLFGVLF A ICFSCLAAHV FALNFLARN HGPRGWVIFT VALLTLVEV INTEWLIIT LVRSGEGERP QGNSSAGWAV ASPCAVANMD FVMALTYVML LLLGAFLGAW PALCGRYKRW RKHG VFVLLT TATSVAIWV WIVMYTYGNK QHNSPTWDDP TLAIALAANA WAFVLFYVIP EVSQVTKSSP EQSYQGDMP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYQPTMALM HKVPSEGYD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VWD	Homo sapiens
620	190744	G Protein- Coupled Receptor GPCR5C	NM_018653	cgggcaaggcg ggggaactcc ctgaagagcg ccttggtcac agcaccttg aagacagcca tgggccatgg ggaocaaacc agagcctggc ctggggagcca ggaaggacat ccacaaagcc ttgggtgagt ggcctgggact ggcctctctt cgttccag gggcttgggc ccaggggccat gtccacaccg gctgcagacca aggcctcaac cccctgtact acaacctgtg tgaacctct ggggcgtggg gcatcgctct ggagggcgcg gctggggcgcg gcatgttcac cactgttg ctacacatca tcttggggc cagcctccc ttgtgcagg acaccaaagaa acggagcccg ctgggggacc aggtatctt ccttgggg accctgggc tctctgct cgtgttgcc tgtgtgtga agcccgact ctacacctgt ggcctcggc gctctctt tgggggtctg ttgccatct gtctcttg tctggcgct cactgttg cctcaact cctggccgg agaaacacag ggcgccgggg ctgggtgac ttacgtgg ctctgtct gacctgtga gagggtcatca tcaatcacaga ggtgtgtgac atcacctcgg ttggggcgag tggcgaggcg ggcctcagc gcaacagcag cgcaggctgg ggcgtggcct cccctgtgc cgtgcgcaac atggacttg tcatggcact catctacgtc atgtctgtc tgcgtggcg ctcttgggg ggcctggcccg cctgtgtgg ccgtacaag cgtggcgta agcatgggg ctgtgtc ctacacacag ccacctcgt tgcataagg ggtgtgtgga tctgtgta tactacgc aacaagcagc acaacagtcc cactgggat gacccacgc tggccatgc cctggccgc aatgcctggg cctgtct ctctacgc atcccgagg tctccagggt gaccagttcc agccacagagc aaagtaccca ggggggacag tacccacc gggcggtggg ctatgagac atcctgaag agcagaaggg tcaagagcatg ttctgtggaga acaaggcctt ttcatggat gaggcggtg cagctaaag ggcgggtgtca ccaatcagcg ggtacatagg gcaactgtg accagtgt accagccac tgaatggcc ctgatgaca agttccgtc cgaaggagct taagacatca tctccacag ggcacggccac aacagcagg tgaatggcg tgcacactcg accctggcg ctgaagacat gtactggcc cagaagccac agggagaggc accgcccgaag gacggcaaga actctcaggt cttaagaac cctacgtgt gggagctgagt cagcggggc gaggagaggc ggggggaatt ggggagggcc ctgaaggact ggcggcgccg aagggaact ccaaggctct cctccctcg gcaggccagc aacatgtgc ccagatctgg aaggggctcc ctctgtcca ggtgttggt ggggtgtcag ggtgtccca cccactcc agtgtgtg ggtcgaaga gccaaccca ggcctcgc agatcact cggcggtcac actccagcca aatagtgtc tcgggggtg gctggcgag cgctatgt tctctgaga ttctgcaac ctcaagagac ttccagggcg ctcaaggcctg gatctgtc ctgtgagg aacaagggt cctaataaat acaattctg ttaataaa aaaaaaaa aaaa MGTPPEPLG ARMAHKALV MCLGLPLFLF PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGIVTTFVL ILVASLPFV QDTKKRSLG TQVFFLLGTL GLFLVFACV VKPDFSTCAS RRFLFGVLF A ICFSCLAAHV FALNFLARN HGPRGWVIFT VALLTLVEV INTEWLIIT LVRSGEGERP QGNSSAGWAV ASPCAVANMD FVMALTYVML LLLGAFLGAW PALCGRYKRW RKHG VFVLLT TATSVAIWV WIVMYTYGNK QHNSPTWDDP TLAIALAANA WAFVLFYVIP EVSQVTKSSP EQSYQGDMP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYQPTMALM HKVPSEGYD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VWD	Homo sapiens
621	190744	G Protein- Coupled Receptor GPCR5C	NP_061123.2	gatcaggag gagataaa MYKDCIESTG DYFLLCD AEG PWGIIIESLA ILGIVVTILL LLAFLFLMRK IQDCSQWNVL PTQLLFLLSV LGLFGLAF AF IELNQQTAP VRYFLFGVLF ALCFSCLLAH ASNLVKLVRG CVSFSWTTIL CIAIGCSLLQ IIAITEYVTL IMTRGMFVN MTPCQLNVDF VVLLVYVFLF MALTFVSKA TFCGPENWK QHGRLLFITV LFSIIWVW ISMLLRGNPQ FQRQPQWDDP VVCIALVTNA WVFLLLYIVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENQELSRAR DSDGAEDVA L TSYGTPIQP QTVDPTECF IPQAKLSPQQ DAGGV cgggcaaggcg ggggaactcc ctgaagagcg ccttggtcac agcaccttg aagacagcca tgggccatgg ggaocaaacc agagcctggc ctggggagcca ggaaggacat ccacaaagcc ttgggtgagt ggcctgggact ggcctctctt cgttccag gggcttgggc ccaggggccat gtccacaccg gctgcagacca aggcctcaac cccctgtact acaacctgtg tgaacctct ggggcgtggg gcatcgctct ggagggcgcg gctggggcgcg gcatgttcac cactgttg ctacacatca tcttggggc cagcctccc ttgtgcagg acaccaaagaa acggagcccg ctgggggacc aggtatctt ccttgggg accctgggc tctctgct cgtgttgcc tgtgtgtga agcccgact ctacacctgt ggcctcggc gctctctt tgggggtctg ttgccatct gtctcttg tctggcgct cactgttg cctcaact cctggccgg agaaacacag ggcgccgggg ctgggtgac ttacgtgg ctctgtct gacctgtga gagggtcatca tcaatcacaga ggtgtgtgac atcacctcgg ttggggcgag tggcgaggcg ggcctcagc gcaacagcag cgcaggctgg ggcgtggcct cccctgtgc cgtgcgcaac atggacttg tcatggcact catctacgtc atgtctgtc tgcgtggcg ctcttgggg ggcctggcccg cctgtgtgg ccgtacaag cgtggcgta agcatgggg ctgtgtc ctacacacag ccacctcgt tgcataagg ggtgtgtgga tctgtgta tactacgc aacaagcagc acaacagtcc cactgggat gacccacgc tggccatgc cctggccgc aatgcctggg cctgtct ctctacgc atcccgagg tctccagggt gaccagttcc agccacagagc aaagtaccca ggggggacag tacccacc gggcggtggg ctatgagac atcctgaag agcagaaggg tcaagagcatg ttctgtggaga acaaggcctt ttcatggat gaggcggtg cagctaaag ggcgggtgtca ccaatcagcg ggtacatagg gcaactgtg accagtgt accagccac tgaatggcc ctgatgaca agttccgtc cgaaggagct taagacatca tctccacag ggcacggccac aacagcagg tgaatggcg tgcacactcg accctggcg ctgaagacat gtactggcc cagaagccac agggagaggc accgcccgaag gacggcaaga actctcaggt cttaagaac cctacgtgt gggagctgagt cagcggggc gaggagaggc ggggggaatt ggggagggcc ctgaaggact ggcggcgccg aagggaact ccaaggctct cctccctcg gcaggccagc aacatgtgc ccagatctgg aaggggctcc ctctgtcca ggtgttggt ggggtgtcag ggtgtccca cccactcc agtgtgtg ggtcgaaga gccaaccca ggcctcgc agatcact cggcggtcac actccagcca aatagtgtc tcgggggtg gctggcgag cgctatgt tctctgaga ttctgcaac ctcaagagac ttccagggcg ctcaaggcctg gatctgtc ctgtgagg aacaagggt cctaataaat acaattctg ttaataaa aaaaaaaa aaaa MGTPPEPLG ARMAHKALV MCLGLPLFLF PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGIVTTFVL ILVASLPFV QDTKKRSLG TQVFFLLGTL GLFLVFACV VKPDFSTCAS RRFLFGVLF A ICFSCLAAHV FALNFLARN HGPRGWVIFT VALLTLVEV INTEWLIIT LVRSGEGERP QGNSSAGWAV ASPCAVANMD FVMALTYVML LLLGAFLGAW PALCGRYKRW RKHG VFVLLT TATSVAIWV WIVMYTYGNK QHNSPTWDDP TLAIALAANA WAFVLFYVIP EVSQVTKSSP EQSYQGDMP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYQPTMALM HKVPSEGYD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VWD	Homo sapiens

622	190745	G Protein-Coupled Receptor LGR7	NM_021634		A	Homo sapiens		
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623	190745	G Protein-Coupled Receptor LGR7	NP_067647.1			MTSGSVFFYI LIFGKYFSGH GGQDVKCSLG YFPCGNITKC LPQLLHCNGV DDCGNQADEH NCGDNNGWSM QFDKYFASY KMTSQYPFEA ETPECLVGSV PVQCLCQGLE LDCDETNLRA VPSVSSNVTA MSLQWNLRK LPPDCFKNYH DLQKLYLQNN KITSISYAF RGLNSLTKLY LSHNRITFLK PGVFEDLHRL EWLIEDNHL SRISPPTYG LNSLILLVLM NNVLTRL PDK PLCQHPRLH WLDLEGNHIL NLRNLTFISC SNLTVLVMRK NKINHLNENT FAPLQKLDEL DLGSKNIEN PPLIFKDLKE LSQLNLSYNP IQKIQANQFD YLVKLKSL EGEISNIQQ RMFRPLMNLS HIYFKKFQYC GYAPHVRSC K PNTDGISSLE NLLASIQRV FVWVVSATC FGNI FVICMR PYTRSENKLY AMSIISLCCA DCLMGYLFV IGGFDLKFPG EYNKHAQLWM ESTHCQLVGS LAILSTEVSV LLLTFLTLEK YICIVYFPRC VRPGKCRIT VLIJWITGF IVAFIPLSNK EFFKNYYGTN GVCFPLHSED TESIGAQIYS VAJFLGINLA AFIIIVFSYG SMFYSVHQSA ITATEIRNQV KEMILAKRF FFIVFTDALC WPIFVVKFL SLIQVEIPGT ITSWVVFIL PINSALNPIL YTLITRPFKE MIHRFWYNYR QRKSMDSKGQ KTYAPSFIV EMWPLQEMPP ELMKPDLFTY PCMSLSQS TRLNSYS		

624	190748	GPCR Ls190748	AX147756	A	Homo sapiens
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626	190749	G Protein-Coupled Receptor GPR62	AF317653	A	Homo sapiens
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627	190749	G Protein-Coupled Receptor GPR62	AAK12638.1	P	Homo sapiens



629	190774	Histamine H4 Receptor	NP_067637.2	<p>acatttatt agtttggtta tgttttgcc tttaaaaca ttcttttgg agatgggggt ctgtctctgt tgcacacgca ggaagtgcagt ggcaltgctt cagctcactg cagccctgac tgcctaggct ccagcaatct tctatgctca gctccacagag tagctgggac cgcaggcact tgcacacag cccactiaaa aatttttaa atgttgctt ttcttgaagt gttctctgct tcttttgic acaaaattc atttttica tagttaatt catctcog gtaagatttt atgttggtt cttrataac ttgcagtic ttacacgtt tgggtatttt calgttctt agaacttia aaccttiaac ttcaaacat aaatacaag tcttttaagt acatgagtc ttgaaatgt acataatgt talataact talgccttac attaaagtc aatatgagaa atacatgtt aacattcaat aataatttta aaaaattgag aaataaactic tcataaalgc aaaaaataaa aaaaaataaa</p>	P	Homo sapiens
630	190823	Formyl Peptide Receptor 1 (FPR1)	NM_002029	<p>MPDNTNSTNL SLSTRVTLAF FMSLVAFAM LGNALVILAF VVDKNLRHRS SYFFLNLAIS DFFVGVISIP LYPHTLFEW DFGKEICVFW LTTDYLLCTA SVYNVLISY DRYLSVSNV V SYRTQHTGVL KIVTLMVA VW VLAFLVNGPM ILVSESWKDE GSECEPGFFS EWWYLAITSF LEFVIPVL V AYFNMYWYS LWKRDHLSRC QSHPLTAVS SNICGHSFRG RLSSRRSLA STEVPASFHS ERQRRKSSLM FSSRTKMNSN TIASKMGFS QSDSVALHQR EHVELLRARR LAKSLAILLG VFAVCWAPYS LFTIVLSFYS SATGPKSVWY RIAFWLQWFN SFVNPLLYPL CHKRFQKAF L KFCIKKQPL PSQHSRSVSS ccagactia gaactacca gagcaagacc acagctggg aacagctcag gagcagacaa gatggagaca aattcctctc tcccacgaa calctcigga gggacacctg ctgactcgc tggctatctc ttccctgata tcatcactia tcttgtaatt gcagtcacct ttgtctcgg ggtctgggc aacggcttg tgaatctgggt ggcctggatic cggatgacac acacagtcac cacatcagt tactgaac tggcgggic tgaatctgt ttacotcca ctggccatt ctatcagtc aggaagacca tgggagagaca ttggccttic ggctggcttc tgtgcaaat cgttttacc atagtgagaca tcaactgt cggaaagtic ttcttgatgc cctctatgc tctggaccgc tgtgttgcc tctgcatcc agctcggacc cagaacacac gcacggtag cctggocaaag aagggtatca tggggccctg gggtatggct ctgctctca catggcagc tatcactgt gtagctacag taccgtgtaa aacgggggaca gtagcctgca cttrtaact ttggccctgg accaacgacc ctaaaagag gataaalg ggcgttgoca tgtgacgtt gtagggcalt atocggtica tcaatggctt cagcgaacc atgtccatcg ttgctgtag ttatggctt atggocaca agatocacaa gcaaggcttg ataaagoca gtcgtcccti acgggtcct tcccttgcc cagcagcct ttctctgc tggctcccat atcagggtgtt ggccttalia gccacagica gaatocgiga gttatgcaa ggcattgaca aagaaatgg tatgtagag gatgtagaca gtagcctggc ctcttcaac agctgcctca acccatgt ctatgcttc atgggccagg actcoggga gaggctgalt cagcccttc cggocagct ggagggggcc ctgacggagg actcaacca aacacagtag acagctacca atttactt acccttgca gagggtgagt tacaggcaaa gtagggagg agctggggga cacttcgag cccacgctc cagctcgc ttaccttag ttaggcttag cacaggcatt tctgctat tttaggatta cccactcalt agaaaaaaa aaaaagcct ttgtgtccc tgaattgggg agaataaaca gatalgagt 1</p>	A	Homo sapiens
631	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	<p>METNSSLPTN ISGTPAVSA GYLFLDIITY LVFAVTFVLG VLGNGLVWV AGFRMTHVT TISYLNLA VA DFCFTSTLPF FMVRKAMGGH WPFGWFLCKF VFTVDINLF GSVELIALA LDRVCVLP HP VWTQNHRTVS LAKKVIIPW VMALLLPV IIRVTTPGK TGTVACTFNF SPWTNDPKER INVAVAMLTV RGIRFIIG SAPMSIVA VS YGLIATKIHK QGLIKSSRPL RVLSFVAAAF FLCWSPYQVW ALIA TVRRE LLOQMYKEIG IAVDVTLSA FFNSCLNPML YVFMGQDFRE RLIHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK atggaaacca actctccat tctctgaat gaaactgagg aggtgtccc tggacctgct ggccacacgg ttcttgat ctctcatg ctagtccag gtagtcaact tgtctcggg gtctgggga atgggctgt gatctgggtg gctggattcc ggaatgacag</p>	P	Homo sapiens
632	190824	Formyl Peptide Receptor-like 2	NM_002030		A	Homo sapiens



(FPRL2)

Formyl Peptide  
Receptor-like 2  
(FPRL2)

P

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METNFSIPLN ETEEVLPEPA GHTVWLWIFSL LVHGVTFVFG VLGNGLVWV  
AGFRMTRTVN TICYLNALA DFSAILPF RMVSVAMREK WPFASFCLKL  
VHVMDINLF VSVYLITIA LDRICVLP HP AWAQNHRTMS LAKRVMITGLW  
IFTIVLTLPN FIFWTISIT NGDYCIENF AFWGDTA VER LNVTITMAKV FLILFIIGF  
TVPMSIITVC YGIIAAKIHNR NHMIKSSRPL RVFAAVVASF FICWFPYELI GILMAVWLKE  
MLLNGKYKII LVLINPTSSL AFFNSCLNPI LYVFMGRNFQ ERLIRSLPTS LERALTVEVPD  
SAQTSNTHIT SASPEETEL QAM

NP\_002021.2

Formyl Peptide  
Receptor-like 2  
(FPRL2)

190824

633

Homo  
sapiens

A

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NM\_013447

EMR2 Hormone  
Receptor

190948

634

Homo  
sapiens

635	190948	EMR2 Hormone Receptor	NP_038475.1	<p>agcaatcac tgcactgca gctctgctc tgcctcttc tggccacat cctctcttc tggcaatg atcaaacggg  acacaaggig ctgtgtcca tcatgocgg tacttgac tatctacc tggccacti cacttgatg ctgtggagg  ccctgtact ctctcact gcaagggaac tgaaggiggt caacttaca agcatcaaca gaticatgaa gaagctcatg  ttccctgigg gtiacggagt cccagctgig acagtgggca ttctggcag ctcaggcct cactttatg gaacacttc  ccgtctgigg ctcaaacag aaaagggaat tataggggc ttcttgagc ctgtctggc cactctcti ggaatttag ttctttct  gggtactct tgaatttga aaaaagact ctctccctc aatagtgaag tgcacacct ccggaacaca aggatgctgg  catitaaag gacactcag ctgtcatcc tgggtgctc ggggtgctg ggtggtgctc aggtgggctc ggtggtgctc  gtcatggct acccttcaac catcatcaac agcttgagg ggtgttcat ctctggggt tactggctcc tcaagccagca  ggctcgggag caataggga aatgttcaa agggatcagg aatagaana ctgagtctga gatgcacaca ctctcagca  gtgtaggc tgcacctcc aaocccagca cgttaacta gaaaactct ctgaataaga tctccctct tgcctggg  aaaatctgaa caatcttga gcatctaga ggggaagaa aagacttgt tctgtgt tcaagaat caccatgtca gcaatgaa  ggatgtatg gaaggcgtc ttggcattca atcttgag aaacgggaaa tcttccagc cctgcaatg gctcalcaa  ctctcagcat atggcggcc agctgggct catacttg caacttga gcaaatat tatgaagctc tagaagctc agacctcti  cacagctct cctcttaca aagactctc caacttga aatgaagcag gaaaacagc ctgaagagctc ttcataccg  acaacatctg aaaggactag aatgttca ccaactctg gattcttaa tttttgt tggttgt tcttctag ttctagggt  ttgattt agtatgta aaaaatiga ttactcac alagatcaag agagacacagg cctctgcti catggagcti taggggaaa  atgaagggtc tcttgagct agatgtact cagaagcga aatcttga aatcagggt ctactgctag gcaattgaag tataaactat  ttataaaca ctgtctcti tcatctac</p>	P	Homo sapiens
636	190955	Leukotriene B4 Receptor BLT1	NM_000752	<p>MGGRVFLVFL AFCVWLTLPG AETQDSRGCA RWCPODSSCV NATACRCNPQ  FSSFSEITT PMETCDDINE CATLSKVSCG KFSDCWNTEG SYDCVCSPGY  EPVSGAKTFK NESENTQDV DECOQNPRLC KSYGTCVNLT GSYTCQCLPG  FKLKPDPKL CTDVNECTSG QNPCHSSTHC LNNVGSYQCR CRPGWQPIPG  SPNPNNTVC EDVDECSSGQ HQCDSSIVCF NTVGSYSCRC RPGWKPRHGI  PNNQKDTVCE DMTFTSTWTPP PGVHSQTLR FFDK VQDLGR DYKPGLANNT  IQSILQALDE LLEAPGDLET LPRLQQHCVA SHLLDGLDV LRGLSKNLSN  GLLNFSYPAG TELESLEVQKQ VDRSVTLRQN QAVMQLDWNQ AQKSGDPGPS  VVGLVSIPGM GKLLAEAPLV LEPEKQMLLH ETHQGLLQDG SPILLSDVIS  AFLSNNDTQN LSPVTFTHS HRSVPKQV LCVFWEHGQN GCGHWATTGC  STIGTRDTST ICRCTHLSF AVLMAHYDVQ EEDPVLTVIT YMGLSVSLLC  LLLALJFL CKAIONTS LHLQLSLCLF LAHLFLVAL DQTGHKVLCS  IIAGTLHYLY LATFTWMLLE ALYLFRTARN LTVVNVSSIN RFMKKLMFPV  GYGPAVTV AISAASRPHLY GTPSRCWLQPEKGFIVGFLG PVCAIFSNNL  VLFLVTL WIL KNRLSSLNSE VSTLRNTRML AFKATAQLFL LGCTWCLGIL  QVGPAARVMA YLFTIINSLQ GVFIPLVYCL LSQQVREQYG KWSKGIRKLL  TESEMHHTLSS SAKADTSKPS TVN</p> <p>gccattct cactccgt ggggtcagga agocctct gaactctgac ttacttct gctggggt ctgocatt ttctatc  ctctgacag tgcaggta tctctctt ggtttct caagcagaac aagtgggggc tctgaaagg taaaggacc  tcaaggcca ccaataact ttgactct cctgagaagt gaggatgaa agggagcag gaaggccat ggtcagatg  aagggaaggac tttttt tttttt ttgtgaat ggggtcgc tctgtatc aggtgggt gcatgggt gatctcagct  cactcagcc tccactct ggttcatat gattctctg cctcagctc ccaagtagct gaggatcag gcatgcca</p>	A	Homo sapiens

637	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	<p>ctacaccag ctacttttg tatittttagt agagagagggg ttacaccalg ttggccagggc tggctctcaaa ctgctiaacat caagtgatct  gctccctca gctcccaaa gtcgtgggagat taccggatag aaccacaca acctggcagg aatttttagt tttagctt ttgagggagac  ttcaagggaaa gtagagacatc cctgtccag gaaacgggga agggggaccat ttctgcatlg ctgggttcc ccttggccag  ggggggcag agggcatcact gttctgtc cctcactct gctctcag ctacgctggc cagctcggcc tcaacttgg gttctiaaag  tggaaclgaa tagtagctgt gtagagagatag gaaagaggtta gggcaaat ccttggccag atcataaat cagatcagc  agggtaacca catgggcaag cacaaaggatag gttctggggg aaggggggaa taattggcat tctgtgtgat accaaggga  ccatttggat ttggcttct accaaaagaa atgggaat gttggacct aatggaaacca gttcccttaa gtaagggggag  gaaagggggg gctggagagat gggcccttcc ccacaccta gatacagct gtaactggag ccaaggacag agtgctggcc  ccttggcat ttacttgg gttccctttaa aatcagatg ttactaaac caaocaga ccaaggacat agtcaagct ccaacacaa  cttctttaa atctaaac aaggggaac aaacacaaaa agatatacag atgttagctt ccaatctgag ccaatttcc ttcttggct  accatactc ctctctat atgataccat tcaacttt gtcaattat ccagctiaa cctgcatct gtagcatct gtagggcacac ccagcctct  cactccac accccttct cctctcac tggctcttcc tggctcttcc tcaatgggoc ccaacttaa gtaggttcttcc tggctctgg  gttccctgg aaaaagact atcccccct claptgaagg gtaggggtag ggggtttcagc ccaacctca ggaagatggc  tttccctgt cctctctct gttgactc cctcttggct gatttagcaa acagcaacta gaaatggggc caggccttgg gcagtgggac  agatccagg ataggctaca ccaacttgg ctagccctgg gattggcatc agcttccac cagttcttgg caaagcttgt  aagttctcc gacgggcatg aacatacat cttctggcag acccccctca claggttag agttcatctc tctgtggct atcatctgc  tgtcagtggc gctggcttgg gggcttccgg gcaacagctt tgggttgg agtatcttga aagggatgca gaaagcttct  gtcactggcc ttgattggct gaaactggcc ctagccggac ttggcttggat gttcacttgg ccttttcc ttacttcc gggccaaaggc  acctggagtt ttggacttgg ttgttccgg cttgtcact atgtcttggc agtcaagcatg tacggcagcg tctgtttat  cacggccag agtctagaa gttcactggc gttggggccgc ccttttgg cccagaaagct acggcaacca ggcgaaggcc  ggcggggct ggcagggcatc ttgggttgg ctttctgt gggccacacc gttctggcgt accggcagat agtgccctgg  aaaaagaa ttggcttgg cttccggc ttcccgagc aaggggacag gggcttccat ctacttcc aggtctgtcac  gggcttctc ctagccctt ttgttgggt gggccagctac tgggacatag gggcttggct acagggccgg cgttccggcc  ggcagccggc caccggccgc cttgttgggt tcatcact gaaacttggc gttcttggc tggccctaca cgttgggaaac  ctggcttagg cggggccgc gctggccggc caggccggcc gtttagggct ctttggggag cggcttgaagc tggcccgcaa  cgtgtctatc gcaactggct tcttagagc caggctgaac cccgttggct acggcttggc cggcgggggc cgtctggct  cggcgggcgt gggcttggc gcaagcttgc ttggggggcac ggggttccgag ggttccagca cggcgggcgg gggcagcctg  ggccagaccg ctaggagcgg cccggccgt ctagggccgg gggcccttga gtagctcact ggttccagcc cttcaagtt  aaacgaactg aactaggctt gttgggaaagg gggcgcaatt cctcttggca gaaatgctagc tctggagccag ttcagtaact  ggaaggagc caggggcggt gaggggcggt agggcggtgg ggcggggggc ggcggggggc agtggaagaa  gaggggaagg ttggagcaag ttggggggc gtttagagcgt gttccagcct gggctccaca gggcagctt accatnaaa  ctgaagctg aa</p>	P	Homo sapiens
638	191039	Trace Amine	AF380185	<p>MNTSSAAPP SLGVEFISLL AILLSVALA VGLPGNSFVV WSLKRMQKR  SVTALMVLNL ALADLAVLLT APFLHFLAQ GTWSFGLAG RLCHYVCGVS  MYASVLLTA MSLSRLA VA RPFVSKLRT KAMARRVLG IWVLSFLAT  PVLAYRTVP WKTNMSLCFP RYPSEGHRAF HLFEAVTGF LLPFLAVVAS  YSDIGRRLLQA RFRRSRTG RL VVILTF AFWLPYHV NLAAGRALA  GQAAGLGVG KRLSLARNVL IALAFSSV NPVLYACAG GLLRSAGVGF  VAKLLEGTGS EASSTRGGS LGQTARSIPA ALEPGPESL TASSPLKNE LN</p>	A	Homo

[illegible]

P Homo sapiens

P

641 191132 G Protein-Coupled Receptor 88 (GPR88) NP\_071332.1

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tataaagt cagaataaaa aaaaaaaa aaaaaaaa aaaaaa

MTNSSSTSTS STTGSLLL CEEESWAGR RIPvSLLYSG LAIGGTLANG  
MVVYLVSFR KLQTSNAFI VNGCAADLSV CALWMPQEA V LGLLPTGSAE  
PPADWDGAGG SYRLRGGL GLGLTVSLLS HCLVALNRYL LITRAPATYQ  
ALYQRRHTAG MLALSWALAL GLVLLPPWA PRPGAAPPRI HYPALLAAAA  
LLAQ TALLH CYLGIVRRVR VSVKRVSVLN FHLHQLP GC AAAAAFPGA  
QHAPGPGGA HPAQAQPLPP ALHPRRAQRR LSGLSVLLC CVFLATQPL  
VWVSLASGFS LPVPWGVHAA SWLLCCALSA LNPLLYTWRN EEFRRSVRSV  
LPGVGDAAA AVAATVPAV SQAQLGTRAA QQHW

A Homo sapiens

A

642 191168 P2Y12 Platelet ADP Receptor NM\_022788

ggctgcaata actactact actgggagca ttcaaacct ccagaaatcaa cagtattcag gtaaccaaca agaaatgcaa  
ggcgtgaca acctcacctc tgcgctggg aacaccagc tggcacagc agactaaca atcacccagg tctctccc  
actgcttac actgctctg ttutgtg actataca aatggcctgg cgaatggat ttcttcaa atccggagta aatcaact  
tatatttt cttaagaaca cagtcattc tgaacttc atgtctga cttttcatt caaaatctt agtgatcca aactgggaac  
aggaccactg agaaatttg ttgtcaagt tacctcgtc atattttt tcaaaiga tatcagatt tcaacttgg gactigatac  
tatcgtgc taccagaaga ccacaggcc atttaaca tcaacocca aaaaatctt gggggctaa atctctc tttcctc tttcctc  
ggcattcag ttactct ctgtctaa catgtctg accaaccagc agccagaga caagaatgg aagaatgct ctctctaa  
atcaggtic ggttactt ggcataaat agtaaatc atctgtcaag tcaatttg gattattc ttaattgta ttatgta  
tactactt acaaaagaac tgaacggc atagtaaga acgaagggg taggttaagt cccaggaaga aaggtgaac  
tcaaatgtt catlactt gctgtact ttattgtt tttcttct cattggcc gaaatcctt caccctgagc caaacccggg  
atgtcttga ctgcactgt gaaatactc tttctatg gaaagagagc actctgtgt taactctt aaatgcagc ctggatcgt  
tcaatatt ttcttgc aagctctca gaaatctt gataatg ctgaatg ccaatctg aactctcgt tccaggaaca

643	191168	P2Y <sub>12</sub> Platelet ADP Receptor	NP_073625.1	<p>ataggaaaaa agaacaggat ggtgggagc caaatgaaga gactccaatg taacaanaa aactaaggaa atattcaat ctcttggc tcaagactcg taaagcaaa ggcgaagta aaaaataaa ctgacaaaga agcaactaag ttaataataa tgaactaaa gaaacagaag attacaaga caattttat ttactttcc agtaagaana gctatctaa aatataaata actaatctaa actgtagcig tattagcagc aaaaacaacg ac</p> <p>MQA VDNLTSA PGNTSLCTRD YKIQVLEFPL LYTVLFFVGL ITNGLAMRIF FQIRSKSNFI IFKNTVISD LLMILTFPFK ILDAKLGTG PLRTFVCQVT SVIFYFTMYI SISFLGLITI DRYQKTRPF KTSNPKNLLG AKILSVVIWA FMFLLSLPNM ILTNRQPRDK NVKKSFLKS EFGLVWHEIV NYICQVIFWI NFLIVVCYT LITKELYRSY VRTRGVGKVP RKKVNVKVF IIA VFFICFV PFHFARIPYT LSQTRDVFDC TAENTLFYVK ESTLWLTSLN ACLDPFIYFF LCKSFRNSLI SMLKCPNSAT SLSQDNRRKKE QDGGDPNEET PM</p>	P	Homo sapiens
644	191193	Trace Amine Receptor 3 (TA3)	AF380189	<p>atgggzaata atttccca agctgaggct gggagcigt gtacaagaa cgtgaagaa lcttgctta aaactctla ctgcagggt cctgatact tctctacgc cgtccttggc ttggggcig tctggcagc gttggaaac ttactggta ttatgctat cctcaactc aaacaactc acacactac aaactttctg atggcgcgc tggccctgic tgaacttctg ggggagcica ctg'ga'gcc cttcagaca gggagcigt tggagagcigt ttggacttt ggggacagtt actgaanaa ctatacalt ttgacacat cctctgitt tgccttta ttacttat cctgatactc tggataga tacaatgctg ttactatcc tctgaacat ccaaccaagt ttactgic agttcaggc atalgcatg ttcttctc gttctttc gicacataa gctttcag ttttiacag ggaagcaacg aagaaggaa tgaggaaata gtagtgctc taactgtg agggagcgc caggctccac tgaatacaaa ctgggctcta cttgtttc ttctatt tataccaat gtcgcaatgg ttttataa cagaagata ttutggtag ccaagcatca gcttaggaag atagaaagta cagocagca agctcagctc tctcagaga gtacaagaa agagtagca aaaaagagcica gaaaggcctgc caaaacctg ggaattgcta tggcagcaat tctgtctc tggctaccat acctgtga tgcagtgat gtagctata tgaatttat aactctct tatgttat agatttat tgggtgtg ttataaati cagctagaa cccctgtat tatgtttc ttaccaatg gttgggaag gcaataaac ttatgaag cgcgaagtc taaagactg atcgtcaac aactaatta ttctgaag agtagagac agataa MVNFSQAEA VELCYKNVNE SCIKTPYSPG PRSILYAVLG FGA VLA AFGN LLVMIAILHF KQLHTPTNFI IASLACADFL VGVTVMPFST VRSVESCWFY GDSYCKFHTC FDTSCFASL FHLCCISVDR YIAVTDPLTY PTKFTVSVSG ICIVLSWFFS VTYSFIFYT GANEEGIEEL VVALTCVGC QAPLNQNWVL LCFLLFFIPN VAMVFTYSKI FLVAKHQARK IESTASQAQS SSESYKVERVA KRERKAAKTL GIAMAAFLVS WLPYLVDVI DAYMNFITPP YVYEILVWCV YVNSAMNPLI YAFFYQWFGK AIKLIVSGKV LRIDSSTTNL FSEEVETD</p>	A	Homo sapiens
645	191193	Trace Amine Receptor 3 (TA3)	AAK71240.1	<p>atgaatgagc cactagata tttagcaat gcttctgatt tcccgattia tgcagcigt ttggaatg gcaatgata aaacatcca ctcaagatgc actactccc ttttatatt ggcattatct tctcgtggc attocaggc aatgcagtag tgaatocac ttactttc aaaatgagac ctgggaagag cagcacatc attatgca acc'ggcctg cagcagatc ctgatactga ccagcctccc cttctgatt cactactag ccaggggoga aaactggalc ttggagatt tcatgataa gttatccgc ttcaactc attcaact gtagagcag atcctctcc tcaactgtt cagcaltic cgtactgig tgaatca ccaatgagc tgcatttoca ttcaaaaa tcatgagca gtttagcct gtcgtgtggt gggatcaat tcactgtag ctgctatcc gatgacctic ttgatcat caaccaacag gaccaacaga tcaagcctgc tgaactac cagttcagat gaactaala ctataagc gtaaacctg atttgactg caactatt ctgctcccc ttggatag ttacacttg ctataacag attatocca ctgagoca tggactgcaa actgacagct gcttaagca gaaagcaga agctiaacca ttctgact ccttgatt ttacgtatg tttaacct ctatctg agggcaltic ggalcgaatc tgcctgcti tcaatcagt gtoccatga gaaatcagc calgaagct acatgctt tagacattia gctgctctga acacttgg</p>	P	Homo sapiens
646	191196	G Protein- Coupled Receptor GPR80	AF411109	<p>atgaatgagc cactagata tttagcaat gcttctgatt tcccgattia tgcagcigt ttggaatg gcaatgata aaacatcca ctcaagatgc actactccc ttttatatt ggcattatct tctcgtggc attocaggc aatgcagtag tgaatocac ttactttc aaaatgagac ctgggaagag cagcacatc attatgca acc'ggcctg cagcagatc ctgatactga ccagcctccc cttctgatt cactactag ccaggggoga aaactggalc ttggagatt tcatgataa gttatccgc ttcaactc attcaact gtagagcag atcctctcc tcaactgtt cagcaltic cgtactgig tgaatca ccaatgagc tgcatttoca ttcaaaaa tcatgagca gtttagcct gtcgtgtggt gggatcaat tcactgtag ctgctatcc gatgacctic ttgatcat caaccaacag gaccaacaga tcaagcctgc tgaactac cagttcagat gaactaala ctataagc gtaaacctg atttgactg caactatt ctgctcccc ttggatag ttacacttg ctataacag attatocca ctgagoca tggactgcaa actgacagct gcttaagca gaaagcaga agctiaacca ttctgact ccttgatt ttacgtatg tttaacct ctatctg agggcaltic ggalcgaatc tgcctgcti tcaatcagt gtoccatga gaaatcagc calgaagct acatgctt tagacattia gctgctctga acacttgg</p>	A	Homo sapiens

647	191196	G Protein-Coupled Receptor GPR80	CAC51133.1	<p>taacctgtta ctatattggg tggcagcaga caactttcag caggctgtct gctcaacagt gagatgcaaa gtaagcggga  accttgagca agcaagaata atagtact caacaaccc tga  MNEPLDYLAN ASDFPDYAAA FGNCTDENIP LKMHYLPVY GIIFLVGFP  NAVVISYIF KMRPWKSSIT IMLNLAACITDL LYLTSLPFLI HYYASGENWI  FGDFMCKFIR FSFHNLYSS ILFLTCFSIF RYCVIHPMS CFSIHKTRCA VVACA VVWII  SLVA VPMTF LITSTNRTR SACLDLTSSD ELNLTWYN ILTATTFCLP LVIVLCTYT  IIHTLTHGLQ TDSCLKQKAR RLITLLAF YVCLFPFHL RVRIESRL SISCSENQI  HEAYVSGPL AALNTFGNLL LYVVSDNFQ QAVCSTVRCK VSGNLEQAKK ISYSNNP</p>	P	Homo sapiens
648	191218	MrgX2 G Protein-Coupled Receptor	AY042214	<p>tccttggccc ttaataaag actaatct tcaagctc tgaattctc tctgtaaaa caggggcggg aattacaca taacagctg  gtatgaaaa tcatgtaaca tgcagcaggt gctcaagct tgttttgt tccagggggca ccaatggagg tttctgagc atggatocaa  ccacccggc ctaggggaaca gaagatgaca cagtgatg aaatgaccaa gccctctc tcttttgg caaggaagacc  ctgatccgg tcttctgat cctttcat gcccggcgg ggctggtagg aaacgggtt gtcctggc tcttgggtt ccgcatggc  agggaacgct tcttctga cgtctcag ctagccgggg ccgacttct cttctctgc ttccagatta taattgctt ggtgtacct  agtaactct tcttctcat tccatcat ttccatct tctcaaac tggatgacc tggcttacc tggcagcct gagcagctg  agcacagctca gccacagagg ctagcctgccc gttctgtggc ccacttgga tgcctggcgc cggccacagac acctgtcagc  ggctgggtgt gttctctct ggccctctc cttactctg agcatctgg aaggggaagt cgtggctt ttttttagt atgggtgact  tggttgtgt cagcattg atttcatc tgcagcggg cgtatttt ttttttagt tcttgggg tccagctgg ccttgggt  caggatctc tgggttoca ggggtctgccc actgacagg cgtacatg ccatctgt cactgtctg ggttctct  tctgggctt gcccctggc attcaggtt tcttaatt atggatctgg aagatctg atgtctat tttctat tctcagct  cagttgtct gttctctt aacagcagtg ccaacccat cttttact tcttgggct ctttaggaa gcatgtggcgg ctagcagcagc  cgatctcaa gctggctc cagagggtc tgcaggat tcttgagg tgcagagtg aaggtgctt ccgtcagggc  acccggaga tgcgagaag cagctgtggg tagagatgga cagcctctac ttccatgga tatatggc tttagaggc  aacttggc cgtctgt gatttctga actttcag tcttgatt aaacatga agatgtct tggaggtt aagttagaca  MDPTTAWGT ESTTVNGNDQ ALLLCGKET LPVFLILFI ALVGLVGNF  VLWLLGFRMR RNAFSVYVLS LAGADFLLC FQIINCL VYL SNFFCSISIN  FPSFTTVMT CAYLAGLSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC  VLLWALSLL SILEGKFCGF LFSDGDSGWC QTFDFTAAW LIFLFMVLCG  SSLALLVRIL CGSRGLPLTR LYL TILLTVL VFLLCGLPFG IQWFLIWIW KDSVDLFC  HPVSVVLSL NSSANPIYF FVGSFRKQWR LQQPILKLAL QRALQDIAEV  DHSEGCFRQG TPMSRSLV</p>	A	Homo sapiens
649	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	<p>tcataact gacatttt ttcaggcaa agtttttag acatttgg catttccct gcatatgt gcaaatgt gggcctgaag  alcttggct tttgcagg ttcagact ggcataag ctaggattgg tcatgtgac atggcgtc atggagtoca gtagagcagg  actcaggga algctgtca cactatgga agaataactg tagatatct tgaataagg agacttgg ttaactct gcttaataat  aataacatag catttggga tgaatgga alacaggat ccatatgtag atattaat gacaataat tccacagctg gtacatatt  ggcaaatg tagggaatgaa tggatgcaa gctatgaagt aatgagctt gccaatgta atgaattgg  cttcattg atttcatat tttcttga aggaataat gtagcaaatg aagggcagga tggcaatgta gccacatg  gtgccaatg caagttaga tccctctca cactocagga tgaatgt ctagcagagg acattacct ctacagtagg  tcttgcagaag attagcaga gttgtgcaaat gacaacctgg atggccggc aatgttagat aataagatc ggtctataga  ggcacttcag aaatttgt aattggat caaagctgaa ggttagcaga attttagag acttgcaga aatgcaggag  atgcaaaag taaagctcac tcaaacat gttctgctgg ttttactgt gaaagtctt ggttctcaa tgaataagct cgtgtggga</p>	P	Homo sapiens
650	191222	G Protein-Coupled Receptor Ls191222	LG94359	<p>taataact gacatttt ttcaggcaa agtttttag acatttgg catttccct gcatatgt gcaaatgt gggcctgaag  alcttggct tttgcagg ttcagact ggcataag ctaggattgg tcatgtgac atggcgtc atggagtoca gtagagcagg  actcaggga algctgtca cactatgga agaataactg tagatatct tgaataagg agacttgg ttaactct gcttaataat  aataacatag catttggga tgaatgga alacaggat ccatatgtag atattaat gacaataat tccacagctg gtacatatt  ggcaaatg tagggaatgaa tggatgcaa gctatgaagt aatgagctt gccaatgta atgaattgg  cttcattg atttcatat tttcttga aggaataat gtagcaaatg aagggcagga tggcaatgta gccacatg  gtgccaatg caagttaga tccctctca cactocagga tgaatgt ctagcagagg acattacct ctacagtagg  tcttgcagaag attagcaga gttgtgcaaat gacaacctgg atggccggc aatgttagat aataagatc ggtctataga  ggcacttcag aaatttgt aattggat caaagctgaa ggttagcaga attttagag acttgcaga aatgcaggag  atgcaaaag taaagctcac tcaaacat gttctgctgg ttttactgt gaaagtctt ggttctcaa tgaataagct cgtgtggga</p>	A	Homo sapiens

651	191222	G Protein-Coupled Receptor Ls191222	ENSP000000199 719	aaattgagga aatgacagag aaggatcaca tagcagactic ttaatcccc ggaatgattc acaacagggtg ttgtcaggtt tcttgaaat attatgcaa caaccagaac aatatgatt ccagtagagg agaagaatcag gagtaggatg gccaaaggagt catccaggti gagatatcc acttcttt caaagcacat agtgcctcta acaggggccc agtgaagttt gttgtgcat aaaaaggcagt gaggcataic t	P	Homo sapiens
				QTLAMHSIE MINNSTLLPG VKLGYEYIDT CTEVTVAMAA TLRFLSKFNC SRETVEFKCD YSSVMPRKA VIGSGYSEIT MAVSRMLNLQ LMPQVGVEST AEILSDKIRF PSFLRTVPSD FHQIKAMAH LQKSGWNWIG IITDDDDYGR LALNTFIQA EANNVCIAFK EVLP AFLSDN TIEVRINRTL KKILEAQVN VIVFLRQFH VFDLFNK AIE MININKMWIAS DNWSTATKIT TIPNVKKIKG VVGFAFRRGN ISSFHSFLQN LHLPSDSHK LLHEYAMHLS ACAYVKDIDL RLHISQLAV FALGYAIRDL CQARDCQPN AFQPWELLGV LKNVTFIDGW NSFHDAHGD LNTGYDVLW KEINGHMTVT KMAEYDLQND VFIPDQETK NEFRNLKQIQ SKCSKECSPG QMKKTTIRSQH ICCYECQNC P ENHYTNQ TDM PHCLLCNNKT HWAPVRSTMC FEKEVEYLNW ND SLAILLLI LSLGLIIFVL VVGIIIFTRNL NTPVVKSSGG LRVCYVILL C HFLNFAS TSF FIGE PQDFTC KTRQTMFGVS FTLCISLIT KSKILLAFS FDPKLQKFLK CLYRPILIF TCTGIQVVIC TLWLFAAPT VEVNVS LPRV ILECEEGSI LAFGTMLGYI AILAFICFIF AFKGYENYN EAKFITFGML IYFIAWITFI PIYATTFGKY VPAVEIIVL ISNYGILYCT FIPKCYVVIC KQEINTKSAF LKMIYSYSSH SVSSI		
652	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	NM_032571	ttttctgagc taggaaaggt gggttgctta cggacagatga gagagcttcc aggcgtgggt accgtatcca cagaatgca gggacattg ctctccag gcccttgctt tctctgagc ctcttgagc ctgtgactca gaaacaacaa acttctgtg cttaagtgccc ccacaatgct tctgtgtgca ataacactca ctgcaccctg aacatctggt atactctggt atcttgggcag aaactatca catctccctt ggagacatgt aagacatita atgaatgtac accacotat agtgtatatt gttggtatiaa cgtctgtgtgt tacaatgtc aaggaaagtt ctactgtcaa tgtgtccag gatatagact gcaattctggg aatgaacaaat tcaatgaatic caatgaagaac accgtgcagg acacacctc ctcaagaca accgaggggca ggaagaagct gcaaaagatt tttgactact tctaccaat cagacttat ggaagaacaga agggagagaca gaaatctcat ccacagctac cactatctc cgggaatgtgg aatcgaaaagt tctagaaact gccttgaaag atccagaaca aaaaagctcg aaaaatccaa acgataaggt agctattgaa actcaagcga ttacagacaa ttgtctgtaa gaaagaaaga caltcaact gaacgttccaa atgaactcaa tggacatccg ttgcagtac atcatccagg gaaacacaca aggtcccaat gocatgtcc ttactcata ttctctct ggaacatca taaatgcaac ttttttga gaaatggata agaaagatca agtgtatctg aactctcagg ttgtgagtg tctatgtga ccacaaggga acgtgtctct ctccaagct gtgacgtgta ctctccagca cgttgaaagatg accccaagta ccacaagaagt ctctgtgtc tacttgaaaga gcacaggggca gggcagccag tgggtccagggt atggctgtcti cctgtatcac gttgaacaga gttcacacat gttgaatgic agtcaactgt ccagcttgc tgtctgag ggcctgacca gccaaggagga ggaatccgtg ctgactgtca tcaactact ggggtctgagc gtctctctg tgtctctct ccttgggcgcc ctactttc tctgtgtga agcatccag aacacaga cctcactgca tctctgctc tctctctg ccactctc ttctctgg ggaatgtg tggaggggtgt gcaactctc ctactgtcac gttccatcat cggcgggtgt tgcacatc tctacttgc cgtctcacc tggatgtctg tggaggggtgt gcaactctc ctactgtcac ggaacctgac agtgggtcaac tactcaaga tcaatagact catgaagtg atcatgtcc cagctgggcta tggcggttcc gttgtgactg tggccattc tgcagctcc tggcctcac ttatgtgaac tgtgtatga tgtgtgtcc accttgacca ggggattcag tggagttcc cgtgtccat tttcttgca attatgtt gttatctg gtttttga ttttgaag aaaaacttcc tccitcaata gttgaagtgic aacatccag aacacaga tttgtgtgtt caaagcaaca gctcagctct tcatcttggg ctgcacatgg tgtctgggt tgtatcagggt ggggtccagtt gcccaggtca tggcctact ctaccalc	A	Homo sapiens



653	193511	EGF-Like Module- Containing Mucin-Like Receptor EMR3	NP_115960.1	<p>atcaacagcc tccaaggctt ctatctctc ttggtctact gctctctcag ccagcaggctc cagaacaat atcaaaatg</p> <p>gtttagagag atcgtaaat caaaatcga gctcgagaca tacacatt ccagcaagat ggtctctgac tcaaaacca</p> <p>gtgagggga tgttttcca ggacaagta agagaaaata ttaaaactag aatatacaac tccatatgga aatatac catggtatc</p> <p>tttggcata tgaagaatga agctaaaggaa aagggaattc ataaacata tctctctg agaggaagta atcaacctt acttccaag</p> <p>ctgtgttc tccaacag gctctcaac aatgtgtt aaattgcat tctctcaaa aaaaaa</p> <p>MQPGLLPGL CFLSLFAGV TQKTKTSCAK CPNNASCNN THCTCNHGYT P</p> <p>SGSGQLFTF PLETCNDINE CTPYSVYCG FNAVYNVNG SFYQCQVPGY</p> <p>RLHSGNEQFS NSNENTQDIT TSSKTTEGRK ELQKIVDKFE SLLTNQTLWR</p> <p>TEGRQEISST ATTILRDVES KVLETALKDP EQKVLKIQND SVAETQAIT DNCSEERKTF</p> <p>NLNVQMNSMD IRSDIQQD TQGPSAIAFI SYSSLGNIN ATTFEEMDKK</p> <p>DQVYLSQVV SAAIGPKRNV SLKSVTLT QHVKMTPTSK KVFCVYWKST</p> <p>GQGSQWSRDG CFLIHVNKSH TMCNCSHLSS FAVLMALTSQ EEDPVLTVIT</p> <p>YVGLSVSLLC LLLAALTFL CKAJQNTSTS LHLQSLCLF LAHLLFLVGI</p> <p>DRTEPKVLCs IIAGALHYLY LAFTWMLLE GVHLFTARN LTVVNYSSIN</p> <p>RLMKWMFPV GYGPAVTVA ISAAWPHLY GTADRCWLHL DQGFMSFLG</p> <p>PVCAIFSANL VLFILVFIL KRKLSLNSSE VSTQNTNRL AFKATAQLFI</p> <p>LGCTWCLGLL QVGPAAQVMA YLFTIINSLQ GFFILVYCL LSQQVQKQYQ</p> <p>KWFRNIVKSK SESETYTLSS KMGPDSPSE GDVFPQVKR KY</p> <p>KHAYICLAI WAYASFWTM PLVGLGDYVP EPFGTSCILD WYLAQASVGG P</p> <p>QVFILNLF CLLLPTAV FSYVKIIKV KSSKEVAHF DSRHSHVLE EMKLTKVAML</p> <p>ICAGFLIAWI PYAVVSVWSA FGRPDSIPQ LSVVPTLLAK SAAMYNPIIY</p> <p>QVIDYKFACC QTGGLKATKK KSLEGFRLHT VTVRKSSAV LEIHEEV</p> <p>agcgaacct cggggcggcc ggagagccag ttggagcggc ggagagcggc agcagcgc gggtatctgt ggtggggggc</p> <p>gaanaagcca ggcccgccag ccggagggggc tccggccgcg gattagatgg tgcacagagg gcggcggggg tgcggagaga</p> <p>caggcggagg ggccggggggc ccggggcggcg ccaggggggcc ggaggggggg ccgagcggcg ggccagccgc</p> <p>aaaggccgga ccggggcggg ggccggggga ggccgtgag ggagggcgga gattatggcg agggcggcg</p> <p>cgggcgggg ccggggga ccggcggcc ccatctct gctctctc cttcttct tccctcag ccaggaggag</p> <p>ctggggggcg ggggcaca gggtgggg ccaggcttag ctgcacac ggggccaaagg gcgcatacgg ggccggagc</p> <p>cttagcttt tgcgggagt ctccgggg ctggggggat ggggggcggt ggccgggggt caggggagctt atctctgg</p> <p>ggctccgagg ggagaggcaa agccggcgga atagtcgagg gcccctgag cagccggaat ggaggtgggg gattgaacac</p> <p>ggcgtccagc catggggcag ccgcgaacga ggagacagac agggagcagg gtcgtgta tactggcgcc cagaggctc</p> <p>ctctggcg ggagacagac ctggcaag aggtatgctg tcaacagggg ctctctct aggggtccc ggctggggga</p> <p>acagctgccc cctccctca gactttga ttggcaca ccggcccaa cgggtgctt ccagcgga cgtctgggaca</p> <p>ggctcccgca aaaggtgggg ccggcgcg tgcgtgggg aattatggc aaacggggagc aagggttcagg gcgagagagc</p> <p>cacgacatcc ggagcagaaa ggagagcccc ccgggggaac tgccttcag ggccctcggg atctggcccc gggctggatt</p> <p>caggccacag cagggcagg acagctctg catcaggttc agcaccoccc gggtctcgga cagctccgga ggccggcgcc</p> <p>aaaggcagc gctccggggg tctctccg tgcggcttc tccggcttc ccccgggcg cgtcccccgg gactccggc</p> <p>ccgtctgaa gccaggaaag taacctggc gaacggggca cgtcttctc ggccggcga cggccaccgc cagtttccgc</p> <p>agtacacta ccaggagctg ggccggga atgaggcagc agggcagcg gggtacggc tgggtctca ggaccgggac</p> <p>ggccggcgagg ccggggcgct agtctctg ctggcgggcac tcaagaacag ccggctgctg gaggctgtca gcatcgacc</p>	Homo sapiens
654	193516	G Protein- Coupled Receptor d1402H5.1	CAC21687.1	<p>KHAYICLAI WAYASFWTM PLVGLGDYVP EPFGTSCILD WYLAQASVGG P</p> <p>QVFILNLF CLLLPTAV FSYVKIIKV KSSKEVAHF DSRHSHVLE EMKLTKVAML</p> <p>ICAGFLIAWI PYAVVSVWSA FGRPDSIPQ LSVVPTLLAK SAAMYNPIIY</p> <p>QVIDYKFACC QTGGLKATKK KSLEGFRLHT VTVRKSSAV LEIHEEV</p> <p>agcgaacct cggggcggcc ggagagccag ttggagcggc ggagagcggc agcagcgc gggtatctgt ggtggggggc</p> <p>gaanaagcca ggcccgccag ccggagggggc tccggccgcg gattagatgg tgcacagagg gcggcggggg tgcggagaga</p> <p>caggcggagg ggccggggggc ccggggcggcg ccaggggggcc ggaggggggg ccgagcggcg ggccagccgc</p> <p>aaaggccgga ccggggcggg ggccggggga ggccgtgag ggagggcgga gattatggcg agggcggcg</p> <p>cgggcgggg ccggggga ccggcggcc ccatctct gctctctc cttcttct tccctcag ccaggaggag</p> <p>ctggggggcg ggggcaca gggtgggg ccaggcttag ctgcacac ggggccaaagg gcgcatacgg ggccggagc</p> <p>cttagcttt tgcgggagt ctccgggg ctggggggat ggggggcggt ggccgggggt caggggagctt atctctgg</p> <p>ggctccgagg ggagaggcaa agccggcgga atagtcgagg gcccctgag cagccggaat ggaggtgggg gattgaacac</p> <p>ggcgtccagc catggggcag ccgcgaacga ggagacagac agggagcagg gtcgtgta tactggcgcc cagaggctc</p> <p>ctctggcg ggagacagac ctggcaag aggtatgctg tcaacagggg ctctctct aggggtccc ggctggggga</p> <p>acagctgccc cctccctca gactttga ttggcaca ccggcccaa cgggtgctt ccagcgga cgtctgggaca</p> <p>ggctcccgca aaaggtgggg ccggcgcg tgcgtgggg aattatggc aaacggggagc aagggttcagg gcgagagagc</p> <p>cacgacatcc ggagcagaaa ggagagcccc ccgggggaac tgccttcag ggccctcggg atctggcccc gggctggatt</p> <p>caggccacag cagggcagg acagctctg catcaggttc agcaccoccc gggtctcgga cagctccgga ggccggcgcc</p> <p>aaaggcagc gctccggggg tctctccg tgcggcttc tccggcttc ccccgggcg cgtcccccgg gactccggc</p> <p>ccgtctgaa gccaggaaag taacctggc gaacggggca cgtcttctc ggccggcga cggccaccgc cagtttccgc</p> <p>agtacacta ccaggagctg ggccggga atgaggcagc agggcagcg gggtacggc tgggtctca ggaccgggac</p> <p>ggccggcgagg ccggggcgct agtctctg ctggcgggcac tcaagaacag ccggctgctg gaggctgtca gcatcgacc</p>	Homo sapiens
655	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NM_001407	<p>KHAYICLAI WAYASFWTM PLVGLGDYVP EPFGTSCILD WYLAQASVGG P</p> <p>QVFILNLF CLLLPTAV FSYVKIIKV KSSKEVAHF DSRHSHVLE EMKLTKVAML</p> <p>ICAGFLIAWI PYAVVSVWSA FGRPDSIPQ LSVVPTLLAK SAAMYNPIIY</p> <p>QVIDYKFACC QTGGLKATKK KSLEGFRLHT VTVRKSSAV LEIHEEV</p> <p>agcgaacct cggggcggcc ggagagccag ttggagcggc ggagagcggc agcagcgc gggtatctgt ggtggggggc</p> <p>gaanaagcca ggcccgccag ccggagggggc tccggccgcg gattagatgg tgcacagagg gcggcggggg tgcggagaga</p> <p>caggcggagg ggccggggggc ccggggcggcg ccaggggggcc ggaggggggg ccgagcggcg ggccagccgc</p> <p>aaaggccgga ccggggcggg ggccggggga ggccgtgag ggagggcgga gattatggcg agggcggcg</p> <p>cgggcgggg ccggggga ccggcggcc ccatctct gctctctc cttcttct tccctcag ccaggaggag</p> <p>ctggggggcg ggggcaca gggtgggg ccaggcttag ctgcacac ggggccaaagg gcgcatacgg ggccggagc</p> <p>cttagcttt tgcgggagt ctccgggg ctggggggat ggggggcggt ggccgggggt caggggagctt atctctgg</p> <p>ggctccgagg ggagaggcaa agccggcgga atagtcgagg gcccctgag cagccggaat ggaggtgggg gattgaacac</p> <p>ggcgtccagc catggggcag ccgcgaacga ggagacagac agggagcagg gtcgtgta tactggcgcc cagaggctc</p> <p>ctctggcg ggagacagac ctggcaag aggtatgctg tcaacagggg ctctctct aggggtccc ggctggggga</p> <p>acagctgccc cctccctca gactttga ttggcaca ccggcccaa cgggtgctt ccagcgga cgtctgggaca</p> <p>ggctcccgca aaaggtgggg ccggcgcg tgcgtgggg aattatggc aaacggggagc aagggttcagg gcgagagagc</p> <p>cacgacatcc ggagcagaaa ggagagcccc ccgggggaac tgccttcag ggccctcggg atctggcccc gggctggatt</p> <p>caggccacag cagggcagg acagctctg catcaggttc agcaccoccc gggtctcgga cagctccgga ggccggcgcc</p> <p>aaaggcagc gctccggggg tctctccg tgcggcttc tccggcttc ccccgggcg cgtcccccgg gactccggc</p> <p>ccgtctgaa gccaggaaag taacctggc gaacggggca cgtcttctc ggccggcga cggccaccgc cagtttccgc</p> <p>agtacacta ccaggagctg ggccggga atgaggcagc agggcagcg gggtacggc tgggtctca ggaccgggac</p> <p>ggccggcgagg ccggggcgct agtctctg ctggcgggcac tcaagaacag ccggctgctg gaggctgtca gcatcgacc</p>	Homo sapiens





[illegible]

656	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	<p>gcaaaaggag cagaacaag ggaaticag accagaatg taggigccac tgcctctat gttacagga tcciccgagg ccctaggcac ctgggctgca ggaagtact ccgtccact cctcttatt tccctaaaa agggaaaaat gactgtacg accctgtca caaaactt actttgcta ttgtctgc tgcacagac tgaagactt aaatitgt tactgttac aagtcacat tcaaaaatg ttttactt gttacact caaaacttg agttacac ttgttaca gtagataat ttttctt ttttccaag tgaagagtag ggaagtgagg agagagactt ggaagacca cctgtgagga cctgacctg gcaatctga ggggtttct aaccocagg tctocagg cgaaggtcag ccttgagtc cgtttaacg cagatccaga agactctgag agtaggcgic ctctaacac gggggagagt ggcctgicag ggcctggggg tggctgtgic agacacctoc tccocacca cccatgcat actttggga agcagcttc tgggagatta gaaatttact ttccctgact ggaagctaat cccacagcc aggaaccaaa ctctcttac cgaagagac cccagctct gaagggtcga gggcctgct ggggtggga ggggtcttt actatgctt agggttgta gaggccctc tgggggtc cctctcca gccacgggc cctcttctt gctgtgtaa atgtccgt gaaagccgpc tctgttgg gaataacti ctatagaaa caaaa</p> <p>MMARRPPWRG LGERSTPILL LLLLSLPLS QEELGGGGHQ GWDPLAATT GPRAHIGGGA LALCPSSGV REDGGPLGV REPVGLRG RRQSRNSRG PPEQPNEELG IEHGVQPLGS RERETGQPG SVLYWRPEVS SCGRTPQLQR GSLSPGALSS GVPGSGNSSP LPSDFLRHH GPKPVSSQRN AGTSRKRVG TARCCGELWA TGSKGQGERA TTSGAERTAP RRNCLPGASG SGPELDSAPR TARTAPASGS APRESRTAPE PAKRMRSRG LFRCRFLPQR PGP RPPLPA RPEARV TSA NRARFRRAAN RHQFPQYNY QTL VPENEA GTAVLRVVAQ DPDAGEAGRL VYSLAALMNS RSELFSDP QSGLRTAAA LDRESMERHY LRVTAQDHGS PRLSATMVA VTVADRNDHS PVFEQAQYRE TLRENVEEGY PILQLRAITDG DAPPNANLRY RFVGPPAARA AAAAFAEIDP RSGLISTSGR VDREHMESE LVVEASDQOQ EPGRSATVR VHITVLDEND NAQFSEKRY VAQVREDVRP HTVVLRTAT DRDKDANGLV HYNISGNSR GHFAIDSLTG EIQVVAPLDF EAEREYALRI RAQDAGRPL SNNTGLASIQ VVDINDHIPI FVSTPFQVSV LENAPLGHVS IHQAVDADH GENARLEYSL TGVADPTPFV INSATGWVSV SGPLDRESVE HYFFGVEARD HGSPPLSASA SVTVTVLDVN DNRPEFTMKE YHLRLNEDAA VGTSVVSVTA VDRDANSAS YQITGGNTRN RFAISTQGGV GLVTLALPLD YKQERYFKLV LTASDRALHD HCYVHNITD ANTHRPVFQS AHYSVSVNED RPMGSTIVI SASDDDVGEN ARITYLLEDN LPQFRIDADS GAITLQAPLD YEDQVITYTLA ITARDNGIPQ KADTTYVEVM VNDVNDNAPO FVASHYTGLV SEDAPPFTSV LQISATDRDA HANGRVQYTF QNGEDGDGDF TIEPTSGIVR TVRRLDREAV SVYELTAYAV DRGVPLRTP VSIQVMVQDV NDNAPVFP AE EFVVRKENS IVGSVVAQIT AVDPDEGPNA HIMYQIVEGN IPELFQMDIF SGELTALIDL DYEAREQYVI VVQATSAPLV SRATVHVRLV DQNDNSPVLN NFQILFNHYV SNRSDTFPSG IIGRIAYDP DVSDHLFYSF ERGNELQLLV VNQTSSELRL SRKLDNNRPL VASML VTVTD GLHSVTAQCV LRVVIITEEL LANSLTVRLE NMWQERFLSP LLGRFLEGVA AVLATPAEDV FIFNIQNDTD VGGTVLNVSF SALAPRGAGA GAAGPWFSSE ELQEQLYVRR AALAARSLLD VLPFDDNVCL REPCENYMKC VSVLRFDSSA PFLASASTLF RPIQPIAGLR CRCPPGFTGD FCETELDLCLY SNPCRNGGAC ARREGGYTCV</p>	P	Homo sapiens
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DTEAGRCV PGVCRNGGTC TDAPNGGFC QCPAGGAFEG			
SSFMFRG LRQRFHLTSLSFATVQSQGLLFYNGRLNE			
QVRLTYSTGESNTVVSPTVPGGLSDGQWHTVHLRYYNK			
PSKDKAVLSVDDCDVAVALQFGAEIGNYSCAAAGVQTS			
LGGVNLPEFPVSHKDFIGCMRDLDHIDGRRVDMMAFV			
KLHFCDSGPCKNSGFCSEWGSFSCDCPVGFGKDCQLT			
TLWNFGSDMAVSPWYLG LAFRTRATQG VLMQVQAGPH			
SVTVTRGS GRASHLLDDQ VTVSDGRWHD LRLEQEEPG			
LDLSLFQDTMAVSELOGLKVKQLHVGGPPGSAEEAPQ			
GSTPSGSPA LPPSHRVNA EPGCVVTNAC ASGPCPHAD			
QPGYYGPG CVDACLNPQ QNGQSCRHLPGAPHGYTDCD			
RMDQQCPRG WWGSPCTGPC NCDVHKGFDP NCNKTNGQCH			
SCLPDCY PVGSTSRSCA PHGQCPGCRP GALGRQCNSC			
RVLVDACP KSLRSGVWWP QTKFGVLATV PCPRGALGAA			
EPDLFNCTSPAFRELSTLLDGLELTKTALDTMEAKKLAQ			
YFSQDVRTARLLAHLAFESHQQGFGLTATQDAHFEN			
TGDLWAALGQAPGGSPG SAGLVRLHLEEYAATLARNME			
NIMLSIDRMEHPSSPRGARRYPRYHNSLFRGQDAWDPH			
SPSEVLPTSSSIENSTTS SVVPPAPPEPEPGISHILLVYRTLGGLL			
RLPQNPVMN SPVSVAVFH GRNFLRGILESPISLEFRLL			
WDPPGLAE QHGVWVTARDCELVHRNGSHA RCRCSTRGTGTF			
EGDLELLAVFTHVVAVSVAALVLTAAILLSLRSLKSN			
LGVAELLFLGHRTHNQLVCTAVAILLHYFFLSTFAWL			
VEPRNVDRGAMRFYHALGWGPVAVLLGLAVGLDPEGYGN			
IWSFAGPVVLVVMNGTMFLAARTSCSTGQREAKKTS			
VSASWLFGLLAVNHSILAFHYLHAGLCGLQGLAVLLL			
WMPACLGRKAAPEEARPAPGLGPGAYNNTALFEESGLIR			
ARSGRTQDQDSQGRSYLRDNVLRHGSAADHTDHS			
AMFHRDAGADSDSDSLSEERSLSIPSESEDNGRTR			
SERLLTHPKDVGNDLLSYWPALGECEAPCALQTWGS			
ANNQDPALTSGDETSLGRAQRQKGLKNRLQYPLV			
RAATLGHRAVPAASYGRIYAGGTGSLSPASRYSSRE			
ERLEEAPAVLRPLSRPGSQECMDAAPGRLEPKDRGST			
AMAGRFGSRDALDLGAPREWLSTLPPRRTRDLDPQP			
DPLPSRP LDSLRSNSREQLDQVPSRHPSREALGPLQLLRAREDS			
LDLSSILASFNSSALSSVQSSSTPLGPHITATPSATA SVLGPSTPRS			
EVPRSEGH			
cca gccicccaac agcaghtggc cccaatgca gaatgggact aacactgagg ccaaccggc	A	Homo	
1 cctactatca gcacacctcc ccgtggcgcc ccaigtcat tgggctcat gcgcactat cctgtctctg		sapiens	
tgg tctgttcat cgtgtctcaag aaccggcaca tgcatactgt caccaacatg tcatctca			

658	193914	Neuropeptide FF 1 Receptor	NP_071429.1		accctggctgt cagtgagccttg cttgtgggca tctctgcat gccaccacc cttgtggaca accatcac tgggtggccc ttgacaaatg ccacatgcaa gtagagcggc ttggtggcagg gcatgctgt gtcggcttcc gttttcacac tgggtggccat tgctgtggaa aggttccgct gcatgctgca cctttccg gtagagctga ccttgctgaa ggcgctcgtc accatggccg tcatctgggc cctggcgtct ccatcatgt gtcctcggc cgtcacgctg accgtaccc gtagagggagca ccactcatg gtggagccc gcaaccgctc ctacccttc tactctgct gggagggcttg gcccgagagag ggcattggca gggctctacac cactgtgctc ttctggcaca tctactggc gccgctggggc ctatcgttgg tcatgtacg ccgcatggcg cgcatagtctct ggcaggcccc gggcccgccgccc cccggggggcg agggagggcttg ggaacccggcg gcatcgggcg gcaaggggcg cgtgtgtgac algctgggca tgggtggcgtc gttctacg cgtctggcg ggcggctgct ggcggctgct cgtctacg actiaggggca gctcaggcg acctggtgac cgtctacg ttcccttgc cgtctggct ggcattggct ggcctttc aacagcaggcg ccaacccat cactacggc tactcaac agaatccg ccggggctc caggccggct locggccc cctctggccc cgccctggc gggaccaca ggaaggctac tccagggcg ccggggggct tctgacagg cgggtcttgc tgggtggcg ggccaggac tccggctgc cctctgagtc gggccctagc agtggggccc ccaggcccg ccgcttccc ctcgggaatg ggcgggtggc tcaccggc tggccagg agggcgcttg cgtctccac cttgcccac ccatccag cgggataic tga MEGEPSPQPN SSWPLSQNGT NTEATPATNL TFSYYQHTS PVAAMFIVAY ALIFLLCMVG NTL VCFIVLK NRHMHTVTNM FILNLA VSDL LVGFCMPTT LVDNLITGWP FDNATCKMSG LVQGMVSAS VFTLVAIAVE RFRClVHPFR EKLTLRKALV TIAVIALAL LIMCPSAVL TVTREHHFM VDAARNRYPPL YSCWEAWPEK GMRRVYTTVL FSHYLAPLA LIVVMYARIA RKLQCAPGA PGEEAADPR ASRRRARVVH MLVMVALFFT LSWPLWALL LLIDYQQLSA PQLHLVTVYA FFAHWLAFF NSSANPIYG YFNENFRGF QAAFRARLCP RPSGSHKEY SERPGGLLHR RVFVVVRPSD SGLPSESQPS SGAPRPGRLP LRNGRVAHHG LPREGPGCSH LPLTIPAWDI	P	Homo sapiens
659	194319	G Protein- Coupled Receptor FLJ22684	NM_025048		agatacgtat actttcttc caaacagcat aagaatgat tggaccaca gtaactgaa ggaaggggctc cctcagatg tgggtgaag agataaatca ccagtcacag actatgcaac cgactcgtcg tttcagtc agggaaaaag aagtttggag tgctgtggct catttttc ttaccttca ctagcgcca cgggtggctc cgggggaaaa algatgacat caaaacaaaa aaagaaactca ttgtgaataa gaaaaaacat ctagggccag tggagaata ttagcgtctg cttcagggtga cctatagaga ttccaaaggag aaaaagagatt tggagaattt tctgaagctc ttgaagcctc catattatg gtcacatggg ctaattagaa ttatcaggc aaaggctacc acagctgca acagcctgaa tggagcttcg cagttgacct gtagagacag ctacacctgg ttctctcc catgcttga tcccaagaac tgtaccttc acagggcttg agcactcca agctgtgaat gcatctcaa caactcagc cagagtgca attcttga gagaacaaag atttggggca cttcaaat taatgaagg ttacaaatg accittgaa ttcatctt gctatatac ccaatatgc aaatggaatt gaaattcaac ttaaaaaag atatgaaga altcaaggti ttaggtcgtg tcaaggtaac caatttgaa tgtactct gtcgccaag ttggagtga algggacaaat ctaggctcac tgaaccttg caactctg ctaccgggt caagagatt ccttgcctca gcttccaag tagctggaa tcaaggcacc tggccacca tccagctaac tttttgta ttttttag agacagggtt tcaacatgti gggccacatg tctcaaat cctgaacct ggtatccg ctagctggc cccaaaag ctaggattac agggcaggc caccatct ggcctaggac cttaaat ggaagacalc ctcaaaatg tgggtcagtg agtagaacta caaaacata gtagtagggc agaaactga aagaaggcag gtagatcag tgaagtgga tgggaaaaag tgaaggttgg ggaatagggt tgggggtgt cgaagggttg attttct tcaagcaacta caggagatat gatgctcat aattcggagc cagaagtggt gcttgggtg agatatcti gacagataa calgtalaca tcatagttca aaacccagta gcatgttt acagcaataa aagaataatt tagtaatta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaaa aaa	A	Homo sapiens

660	194319	G Protein- Coupled Receptor FLJ22684	NP_079324.1	MKVGVLWLIS FFFTFDGHGG FLGKNDDIKT KKLIVNKKK HLPVVEEYQL LLQVYRDSK EKRDRLNFLK LLKPPLL WSH GLIRIRAKA TTDCNSLNGV LQCTCEDSYT WFPSPCLDPQ NCYLHTAGAL PSCECHLNNL SQSVNFCERT KIWGTFKINE RFTNDLLNSS SAIYSKYANG IEIQLKAYE RIQGFESVQV TQFRMSLLSP KLECNQGTI	P	Homo sapiens
661	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NM_030774	atgagtctt gcaactcac aacgtcaccc ttgttgctta ttggtatccc aggatattagag aaagcccatt tctgggtgg cttccccctc ctttccattt atgtatggc aatgtttgga aactgacagc ttgtcttcat cgtaaaggagc gaacgacgac tgcacgctcc gaatgacctc ttcttcgca tgcctgacg catgacccg gccttatcca catccacct gaactaagac ctgcccctt tctgtttga ttcccgagag attagcttg aggcctgtct taccagatg ttctttatc algccctctc agccattgaa tccaccatcc tgcctggocat ggccttgac cgttatgttg ccatctgcca cccactggcg catgtgcag tgcctcaaaa lacagtataa gccacgattg gcatctggcg tctgtccgc ggcctctt ttitttccc actgcctctg ctgataacgc ggcctggcctt ctgcacatcc aatgtctct cgcatctcta ttgtgtccac caggaigtaa tgaagtggc ctatgcagac actttgcca atgtgttata tggcttact gccattctgc tggctatggg cgtggagcgt atgttcatct cctgttctta ttcttgata atacgaacgg ttcttgcaact gccctocaag tcaagagcggg ccaaggcctt tggaaacctg ggtcacaca ttggtgtgt actgccttc tatgtccac ttatggcct ctgagtgtia caccgcttg gaaacagcct tcatccatt gtcgtgtg tcaagggtga catctaccg ctgtgcctc ctgtatcaa tccatcatc tatgttgcca aaaccaaaaa gatcagaaca cgggtgctgg ctatgtcaa gatcagctg gacaaggact tgcaggctg tggagggaag tga MSSCNFTHAT FVLIGIPGLE KAHFWVGFP LLSMYVVMFG NCIVVFIVRT	A	Homo sapiens
662	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	ERSLHAPMYL FLCMLAADL ALSTSTMPKI LALFWFDSRE ISFEACLQOM FFIHALSAIE STILLAMAFD RYVAICHLR HAAVLNNTVT AQIGIVAVVR GSLFFPLPL LIKRLAFCHS NVLSHSCVH QDVMKLAYAD TLPNVYGLT ALLVMGVDV MFISLSYFLI RTVLQLPSK SERAKAFGTC VSHIGVLAF YVPLIGLSV VHRFGNSLHPI VRVVMGDIYL LLPPVINPII YGAKTKQRT RVLAMFKISC DKDLQAVGGK	P	Homo sapiens
663	194743	FLJ14454	NM_032787	actttttca tgttctctt gagtgaagga tgaagaaatt gaaagcagag tatgcacct ttattaggag attcaaatg catctactg gattagcttc azaagtcta aaatacaaa aatocactct gacagatcac tgaaggagagg actgtttt ctgttttaga atagttccg attaaactt ttagctcaag aagaataa gaa gctagtatt tctacccag gagtggattt ggtgtggc ttacccatgg ctctggccg tgcctggaac cttagggctg tgggtgctgt cgtgtgtgga ctactgactg gcatctatt gggactgggc atctggagga ttgtgtacag gatccaaa ggaataacta ctctctac aagcacct acagactgt gcaaggatgg tggaaactgg gaaatggca gatatttg tacagaagag tgaagaggac tgaagtac aatgtctaat ttgtgaaa atagtaccta tatgggttt acttttgcca gaalccag tggcagatat ggaacatct tgcacacatg tggcagagat actccaatg cgggcaatcc aatggcagc cgtgtgtgca gctctct atagtggag atagaattac aaaaatgac aatagggaat tgcacatgaaa atctgggaac cctggaaaag caggtagagg algtcacagc accactaat aacattctt ctgaagtoca gattttaaca tctgagcca aaaaataac tgcgtgaagc atcactatg ctacggagt ggttgacagc alattcaaca ctccagaaa tgcctacct gaggcaaaa aagtggcat agtaacagtg agtcaactcc tagatgccag tgaagtgt ttcaagag ttgtgtctac tgcataatg gatgcttia caagcttat tgaagcaatg gtagactatt cctgtttt gggtaataca tcaagtggg aacatacat agcaatagc tcaagcaat tctctcaga aatgcgggtg gggccttcaa atgtcgct ctctgtgcag aaaggagctia gcagttctt agtttctagt tcaacttia tacataaaa tggtagggc cttaacccag atgcacagc tgaagttcag gctgtctia atagacgaa aaattacacc aagacatgg gcttttagt ttatcaaaa gatcaagctt tcaatcaaa aacttiaca gctaaatcgg atttagtca aaaaattatc tcaagcaaaa ctgtagaaa tgaagcaagat cagagtgct ctgtgacat ggtcttagt ccaagtiaca accaaaaa atttcaact tatctatg cctgtgtia ttggaattg tgaagcagg actgggacac ataggtgtg caaaaagaca agggcactga tegtactg cgtgtccgt gcaacatcac tactaattt gctgtattaa tgaatttcaa aaaggattat caatatocca	A	Homo sapiens



664	194743	FLJ14454	NP_116176.1	<p>aatcaattga cataattacc aacgttggat gtcacatgic tgttaactgt cttgctctca cagtattat tcaatattgc accaggaaaag tcagaaaaac ctacgaacc tgggtttgg tcaatctgic catacaag tgaattica accctctt tgttttggga attgaaaaact ccaataagaa ctgicagaca agtgaaggig acatcaalaa tatgactt gacaalaa acataccacag gacagacacc attaacatcc ogaatcccat gtcactgic atgcccgcct tactgactia ttcttgta gtagactta cctgggaacgc actcagcgt gcacagctct attactct aataaggacc atgaagcct tccctggca ttcaatct tcatctcat taattggatg gggagtcca gctatagtag tggctataac agtgggaggt attatctc agaaggaaa taatccacag tgggaattag actacaggca agaagaataic tctggcicgg caattccaga acccaatggt gtaaaaaa tccgcctgt ggtgcatc atcgtaacctg taaccattat cctcatcagc aatgtgtta tgtttatc aatctgac aagtgctgt ggaagaataa ccagaacctg acaagacaa aaaaagtttc atccatgaag aagattgta gcacattatc tgtgcagt gttttgaa ttactggat tctagcatc ctagctag ttaattgatga tagcatcagg atcgtctca gctacatc cttccctttc aacactacac agggatgca aattttatc cttgactg ttagaacaa agcttccag agtgaagcti ccaaggtgt gattgtcta tgcctatg ggaagaagaa gtcattgct tcatgacgc ggccgaggct gcgtgtaag atgataat tccatggic atgccaacc ttacatgaac gcttiaggct actggaaacc tctccagta ctgaggaaat cacactctt gaaagtgaca atgcaaaaga aagcatctag acagtataac ttactgtg tggctttt aatcacctg ttgagttt atctgttt cttcttatt tccagttct ctcaagaagt cttctcaat gttattgtc caggataag aatgataa aacctgtgt ttattatc tggcataat ggcattgta ttcttcat ttccaatag attgtact gaataaggig aagaattica caacatcac aagagiaca ttgtctta tatcgttaa tcttgtag acacttgac aaaaalgtag aacctatac aaattcttt acaagtact ataaaggaca caaagaaga acttiaccti ccagaacaaa atgactctg atgaacagtg tgggggatt tctgtatg tatataact ttgactctg</p>	Homo sapiens
665	194745	G Protein-Coupled Receptor SLT/MCH2	NM_032503	<p>MASCRAWNLR VLVAVVCGLL TGILGLGIW RIVRIQRGK STSSSTPTE FCRNGGTWEN GRICITEWK GLRCTIANFC ENSTYMGFTF ARIPVGRYGP SLQTCGKDTN NAGNPMVRL CSLSYGEIE LQKVTIGNCN ENLETLEKQV EDVTAPLNNI SSEVQILTSD ANKLTAEINIT SATRVVGQIF NTSRNASPEA KKVAIVTVSQ LLDASEDAFQ RVAATANDDA LTTLEQMET YSLSLGNQSV VEPNIAQSA NFSSENA VGP SNVRFSVQKG ASSLVSSST FIHTNVVDGLN PDAQTELQVL LNMTKNYTKT CGFVVYQNDK LFQSKTFTAK SDFSQKIIS KTDENEQDOS ASVDMVFSPK YNQKEFQLYS YACVYWNLSA KDWDITYGQCK DKGTDGFLRC RCNHTTNFAV LMTFKKDYQY PKSLDILSNV GCALSVTGLA LTVIFQIVTR KVRKTSVTWV LVNLCISMLI FNLLFVFGIE NSNKNLQTS GDINNIDFDN NDPRITDIN IPNPMCTAIA ALLHYFLLVT FTWNALSAQ LYLLLRITMK PLPRHFILFI SLIGWGPVPI VVAITVGVYI SQNGNNPQWE LDYRQEKICW LAIPEPNGVI KSPLLWSFIV PVTILISNV VMFTISIKV LWKNNQNLT TKKVSSMKKI VSTLSVA VVF GITWILAYLM LVNDDSRIV FSYFCLFNT TQGLQIFLY TVRTKVFQSE ASKVLMLLSS IGRKSLPSV TRPRLRVKMY NFLRSLPTLH ERFRLLTSP STEETLSES DNAKESI</p> <p>cggccgcggc cagggctgc gaggcaccca cgtcttaaa aagagcacga cgcacccag gctcggattg gatgaagtc aaagctttaa tccctgaaa gggcacgaac aatgaatcca ttcatgcat ctgttgga cactctgccc gaactttaa acaaatcctg gaataaagag ttgctatc aaactgocag tgtgttgat acagtatcc tccctccat gattggatt atctgtcaa cagggctggt tggcaacalc ctcatgtat tcaataat aagatccagg aaaaaaacag tccctgacat ctatactgc aactggctg tggctgatt gggccacata gttggaagc cttttat tcaacaatgg gcccgggggg gagaaggggt gttggggggg cctctctgca ccatcatcac atccctggat actglaacc aattggctg tagtgccalc atgactgtaa tgaatgtaga caggtacttt gcccctgccc</p>	Homo sapiens

666	194745	G Protein- Coupled Receptor SLT/MCH2	NP_115892.1	<p>aaccatttgc actgacacgt tggagaacaa ggtacaagac catccggatc aatttgggoc ttggggcagc ttctttatc ctggcattgc ctgtctgggt clactgaag gtcataaat ttaagacagg tgttggaggt tgtgttttg atttgacatc ccttgacgat gtacttgggt atacacttta ttgacgata acaactttt ttctccctt acccttgat ttgggtgct atattttaat ttatgtctat acttggggaga tgtatcaaa gtaataaggat gccagatgct gcaatccag tgaacaaa caparagtga tgaagttag aaagatgggt ctgg'gt'gg tggtagtct talctgtgt gctgcccctt atcatggtt acaactgggt aacttacaga tggacaagoc cacactggoc ttctatgg gttattacct ctcatctgt ctgagctatg ccagcagcag caltaacct ttctctaca tctgtctgag tggaaattc cagaaagc tgcctcaaat ccaaaagaga ggcactgaga aggaaatcaa caatalggga aacactciga aatcacact ttaggaaagt acatgaltca ccatgagct agacatgct gctatctta ctggattat tggaaaggc aggtgtaocg atatgtttat gccatctt ctgtgtact tgtgactct agcagcattgg aagagaagtg taacatgca aatacaatga gcttaatg ctaatgtaa aaaaaaaaaa aaaaaaaaaa</p> <p>MNPFHASCWN TSAELLNKSX NKEFAYQTAS VVDTVLPSM IGHICSTGLV GNILIVFTII P RSRKKTPVDI YICNLAVADL VHIUGMPFLI HQWARGGEWV FGGPLCTIIT SLDTCNQFAC SAIMTVMSVD RYFALVQFPR LTRWRTRYKT IRINLGLWAA SFILALPVWV YSKVIKFDG VESCAFDLTS PDDVLYWYTL YLTITFFFL PLILVCYILI LCYTWEYQQ NKDARCCNPS VPKQXVMKLT KMLVLVVVF ILSAAPYHVI QLVNLQMEQP TLAFYVGYL SICLSYASS INPFLYLLS GNFQKRLPQI QRRATEKEIN NMGNTLKSHF</p> <p>ccacacac agggccga tctgggtga tgaagtcaga cagcagcag ctgggtgagt gctaacgctc agataagcat ctgtgocatt gttgggactc cctgggtgc tctgacccg gacacttgc tctgcccgc catgtacaac gggctgct ggcgcaltga gggggacac accatccagg tgaagccgc gctgtcatt gttggcttg tcttggcgc actaggcaat gggtgcgcc tgtgtggtt ctgtctcac atgaagacct ggaagccag cactgtttac ctttcaatt tggccgtggc tgaattctc cttatgact gctgtctt tgggacagac tattacctca gacgagaca ctgggcttt ggggacaltc cctgocgagt ggggctctc acgttgcca tgaacaggc cgggagcalt gtttctta cgtgtgtgct tgggagcagg tatttcaaac tgggtcaacc ccaccagcg tgaacacta tctacccc ggtggcgctt ggcactgct gcaacctg ggcctggct atcctgggaa cagtgtatc ttgtctggag aacalcit gctgtcaaga gacggccgct tctgtgaga gcttcatcat ggaagtcggc aatggctggc atgacatcat gttccagctg gatttctta tgcctcctg catcaltta ttgtctct tcaagattgt tggagcctg agggcaggc agcagctggc capacagct cggatgaaga aggcgaacc gttcatatg gttggcga ttgtgtcat cacatgtac ctgcccagcg tgtctgtag acttaltt ctgtggcgg tgcctcagag tgcctggat cctctgctc atggggcct gacataacc ctgactca cctacatga cagcaltg gacccctg gatccctgg tgtatttt tcaagcccc tctttcca aatcttcaa caagctcaa atctgcagc tgaacccaa gcaagccaga cactcaaaa cacaaggcc ggaagagatg ccaatttga accctggctg caggagctg atcagctgg caaatgtt ccaagccag tctgtggc aatgggaltc ccaatgtt ggtgtgcat gaaacagcag accaaca ctaggaaga tagagtggt actagaatt aactgtgt aagggtgg gggcttga aatggaccc ccttttcta tggcaagc gttctcga catgaactg atccttca tctgtcga aatgaattc acacaat accittgg gaggctcag tt</p> <p>MYNGSCRIE GDTISQVMPP LLIVAFV LGA LGNGVALCGF CFHMKTWKPS TVYLFNLAVA DFLMCLPF RTDYLLRRH WAFGDIPCRV GLFTLAMNRA GSIVFLTVVA ADRYFKVVHP HHAVENTISTR VAAGIVCTLW ALVILGTVYL LLENHLCVQE TAVSCSEFIM ESANGWHDIM FQLEFFMPLG IILFCSFKIV WSLRRRQQLA RQARMKKA TR FIMVVAIVEI TCYLPVSAR LYFLWTVPS ACDPSVHGAL HITLSFTYMN SMLDPLVYYF SSPSPFKFYN KLKICSLKPK</p>	Homo sapiens
667	194756	Chemokine Receptor FKSG80/GPR81	NM_032554	<p>ccacacac agggccga tctgggtga tgaagtcaga cagcagcag ctgggtgagt gctaacgctc agataagcat ctgtgocatt gttgggactc cctgggtgc tctgacccg gacacttgc tctgcccgc catgtacaac gggctgct ggcgcaltga gggggacac accatccagg tgaagccgc gctgtcatt gttggcttg tcttggcgc actaggcaat gggtgcgcc tgtgtggtt ctgtctcac atgaagacct ggaagccag cactgtttac ctttcaatt tggccgtggc tgaattctc cttatgact gctgtctt tgggacagac tattacctca gacgagaca ctgggcttt ggggacaltc cctgocgagt ggggctctc acgttgcca tgaacaggc cgggagcalt gtttctta cgtgtgtgct tgggagcagg tatttcaaac tgggtcaacc ccaccagcg tgaacacta tctacccc ggtggcgctt ggcactgct gcaacctg ggcctggct atcctgggaa cagtgtatc ttgtctggag aacalcit gctgtcaaga gacggccgct tctgtgaga gcttcatcat ggaagtcggc aatggctggc atgacatcat gttccagctg gatttctta tgcctcctg catcaltta ttgtctct tcaagattgt tggagcctg agggcaggc agcagctggc capacagct cggatgaaga aggcgaacc gttcatatg gttggcga ttgtgtcat cacatgtac ctgcccagcg tgtctgtag acttaltt ctgtggcgg tgcctcagag tgcctggat cctctgctc atggggcct gacataacc ctgactca cctacatga cagcaltg gacccctg gatccctgg tgtatttt tcaagcccc tctttcca aatcttcaa caagctcaa atctgcagc tgaacccaa gcaagccaga cactcaaaa cacaaggcc ggaagagatg ccaatttga accctggctg caggagctg atcagctgg caaatgtt ccaagccag tctgtggc aatgggaltc ccaatgtt ggtgtgcat gaaacagcag accaaca ctaggaaga tagagtggt actagaatt aactgtgt aagggtgg gggcttga aatggaccc ccttttcta tggcaagc gttctcga catgaactg atccttca tctgtcga aatgaattc acacaat accittgg gaggctcag tt</p> <p>MYNGSCRIE GDTISQVMPP LLIVAFV LGA LGNGVALCGF CFHMKTWKPS TVYLFNLAVA DFLMCLPF RTDYLLRRH WAFGDIPCRV GLFTLAMNRA GSIVFLTVVA ADRYFKVVHP HHAVENTISTR VAAGIVCTLW ALVILGTVYL LLENHLCVQE TAVSCSEFIM ESANGWHDIM FQLEFFMPLG IILFCSFKIV WSLRRRQQLA RQARMKKA TR FIMVVAIVEI TCYLPVSAR LYFLWTVPS ACDPSVHGAL HITLSFTYMN SMLDPLVYYF SSPSPFKFYN KLKICSLKPK</p>	Homo sapiens
668	194756	Chemokine Receptor FKSG80/GPR81	NP_115943.1	<p>aaccatttgc actgacacgt tggagaacaa ggtacaagac catccggatc aatttgggoc ttggggcagc ttctttatc ctggcattgc ctgtctgggt clactgaag gtcataaat ttaagacagg tgttggaggt tgtgttttg atttgacatc ccttgacgat gtacttgggt atacacttta ttgacgata acaactttt ttctccctt acccttgat ttgggtgct atattttaat ttatgtctat acttggggaga tgtatcaaa gtaataaggat gccagatgct gcaatccag tgaacaaa caparagtga tgaagttag aaagatgggt ctgg'gt'gg tggtagtct talctgtgt gctgcccctt atcatggtt acaactgggt aacttacaga tggacaagoc cacactggoc ttctatgg gttattacct ctcatctgt ctgagctatg ccagcagcag caltaacct ttctctaca tctgtctgag tggaaattc cagaaagc tgcctcaaat ccaaaagaga ggcactgaga aggaaatcaa caatalggga aacactciga aatcacact ttaggaaagt acatgaltca ccatgagct agacatgct gctatctta ctggattat tggaaaggc aggtgtaocg atatgtttat gccatctt ctgtgtact tgtgactct agcagcattgg aagagaagtg taacatgca aatacaatga gcttaatg ctaatgtaa aaaaaaaaaa aaaaaaaaaa</p> <p>MNPFHASCWN TSAELLNKSX NKEFAYQTAS VVDTVLPSM IGHICSTGLV GNILIVFTII P RSRKKTPVDI YICNLAVADL VHIUGMPFLI HQWARGGEWV FGGPLCTIIT SLDTCNQFAC SAIMTVMSVD RYFALVQFPR LTRWRTRYKT IRINLGLWAA SFILALPVWV YSKVIKFDG VESCAFDLTS PDDVLYWYTL YLTITFFFL PLILVCYILI LCYTWEYQQ NKDARCCNPS VPKQXVMKLT KMLVLVVVF ILSAAPYHVI QLVNLQMEQP TLAFYVGYL SICLSYASS INPFLYLLS GNFQKRLPQI QRRATEKEIN NMGNTLKSHF</p> <p>ccacacac agggccga tctgggtga tgaagtcaga cagcagcag ctgggtgagt gctaacgctc agataagcat ctgtgocatt gttgggactc cctgggtgc tctgacccg gacacttgc tctgcccgc catgtacaac gggctgct ggcgcaltga gggggacac accatccagg tgaagccgc gctgtcatt gttggcttg tcttggcgc actaggcaat gggtgcgcc tgtgtggtt ctgtctcac atgaagacct ggaagccag cactgtttac ctttcaatt tggccgtggc tgaattctc cttatgact gctgtctt tgggacagac tattacctca gacgagaca ctgggcttt ggggacaltc cctgocgagt ggggctctc acgttgcca tgaacaggc cgggagcalt gtttctta cgtgtgtgct tgggagcagg tatttcaaac tgggtcaacc ccaccagcg tgaacacta tctacccc ggtggcgctt ggcactgct gcaacctg ggcctggct atcctgggaa cagtgtatc ttgtctggag aacalcit gctgtcaaga gacggccgct tctgtgaga gcttcatcat ggaagtcggc aatggctggc atgacatcat gttccagctg gatttctta tgcctcctg catcaltta ttgtctct tcaagattgt tggagcctg agggcaggc agcagctggc capacagct cggatgaaga aggcgaacc gttcatatg gttggcga ttgtgtcat cacatgtac ctgcccagcg tgtctgtag acttaltt ctgtggcgg tgcctcagag tgcctggat cctctgctc atggggcct gacataacc ctgactca cctacatga cagcaltg gacccctg gatccctgg tgtatttt tcaagcccc tctttcca aatcttcaa caagctcaa atctgcagc tgaacccaa gcaagccaga cactcaaaa cacaaggcc ggaagagatg ccaatttga accctggctg caggagctg atcagctgg caaatgtt ccaagccag tctgtggc aatgggaltc ccaatgtt ggtgtgcat gaaacagcag accaaca ctaggaaga tagagtggt actagaatt aactgtgt aagggtgg gggcttga aatggaccc ccttttcta tggcaagc gttctcga catgaactg atccttca tctgtcga aatgaattc acacaat accittgg gaggctcag tt</p> <p>MYNGSCRIE GDTISQVMPP LLIVAFV LGA LGNGVALCGF CFHMKTWKPS TVYLFNLAVA DFLMCLPF RTDYLLRRH WAFGDIPCRV GLFTLAMNRA GSIVFLTVVA ADRYFKVVHP HHAVENTISTR VAAGIVCTLW ALVILGTVYL LLENHLCVQE TAVSCSEFIM ESANGWHDIM FQLEFFMPLG IILFCSFKIV WSLRRRQQLA RQARMKKA TR FIMVVAIVEI TCYLPVSAR LYFLWTVPS ACDPSVHGAL HITLSFTYMN SMLDPLVYYF SSPSPFKFYN KLKICSLKPK</p>	Homo sapiens



671	194858	G Protein-Coupled Receptor LS194858	LG94710	QGLFIFL FHC LLNSEVRAAF KHKTKVWSLT SSSARTSNAK PFHSDLMNGT RPGMASTKLS PWDKSSSAH RVDLSAV tiagtiacag tcagagcga cacticttg gcticttggg tggtaggcaa tcttggggcc gggactgtcc cggggaggctc ttcccacag cccctgcagg cactttggg cggctgccc ctaggggggct ggttagcgct gtagccocag cccatggct acggggcactg cggctgact ggcacttct agggagagga gggagacag tggccocagg cccatggctg gggctgtct ataggccagg actgagagga gcagtgtggc cactgtaggc cccagacaca ggcgaagag cagcatggct ccagccgtg cccttgctg cctccagga agggcccggg ccaggccgga gggctcactg cggcacactg cccgtccag ccggcagatg tccttcagct gggcggtggg agtggccagc agcgccagc agagagaggg agcagcacc accggggggca gcaaggagccc atagacttg aggtacagg agggggggg gaaagatagcc tgggagctgc agttggacc aggggtccag tggttccac ccaggccggg cagactggca aagagcagg gaccagcca ggtgagagc agggccagcc gaatgctcc aggggggctgg agtggccca ggaactgcat gtagcctcc cgtgacaca gcaagaggt ggaagagag gaaagagag agaaagtggg agccaaagt agagggagg aggaaccagta acccgccga ctcgtgtcc acagccctgg caatgtggg aatgccagac ccgtgagcag ccaggccagc agtaggctca ggaagagca ggcagcagg gggctggcga gggcgccggc ccaggccgatg ccaggggcta ggaagaggt cggcggtg atgaggctg ctagggcag ccaggccag ggaagagccc aagacccc tgggaatggg gctggcac ccggcagtg tgggggt cactgtg ctagggcag gggagagc gggagagc gggagagc gggagagc QDTRHGNRC RAGCSNLT RKAQAQAIP APNSHACRLP LQDSPVPRK P MTPNSTGEVP SPIPKGALGL SLALASLIIT ANLLALGIA GTAAACAATCW LLLPETAGW AAHSGGIATL PGLWNQRRG YWSCLLVLA PNFSFLSLA NLLL VHGERY MAVLRPLQPP GSIRLALLT WAGPLLFASL PALGWNHWTP GANCSSQAIF PAPYLEVY GLLLPVGA AFLSVRLAT AHRQLQDICR LERAVCRDEP SALARALTWR QARAQAGAML LFGLCWGPYV ATLLSVLAY EQRPLPGPT LLSLLSLGSA SAAAVPVAMG LGDQRYTAPW RQPPKGACRG CGEPPGTVP APALPTTQA KAVSTWT tcaggccag gaaagagtaa tcatggg cagagcactg gtagatgag tgggggggt tggatctaa tggatctcc atgttagcac agaaactgtg tggcagtaga gaaagagtag gcttagag cagcaagaac tggattcaa actggattg aggacccca cctttgata ggtgactat tctgtgtg tctgtgtt tccagggg accagactgg ggtttctgag gggtgggggaa atcagaagac atacagctgg tgaacaa tggtttctg tccagggg accagactgg ggtttctgag cagggatca accatccag tctgggtac agaaactgaca ccaatcaac gacgtgagga gactctgg tacaagcaga ccctgagcti cagggggctg acgtgcatg tttccgtg cggctgaca ggaacgggg tggctgtg gctctggg tggcagcag cagaggaacg tggctccat taccctca accgtgctg gggcggact cttctctta gggggccat taaatgtg ccgttagcc tcatcaat ccggccatcc atctcaaaa tctcagcc tggatgacc ttccctact ttatggct aagcagctg agcgccatca gcaaccagcg ctgctgtcc atctgtgg ccactggga cactggcc cggccagat accgtgac ggtagtgg gttctgtct gggccctgt cgtgtgctg agtatctgg agtggagt cgtgactc cgttagtg ggtgtgac tgggtggg gaaagtag atttatca aatggctgg ctgtgttt tatgtgtt tctgtggg tccagccctg tctgtgtg cagggatct tggggtccc ggaagatg gctgaccagg gtagagga ccatctct cacaagtgt gcttctcc tctgtggct gcccgtgg attaggggg cctgtttc caggaacac ctaggggct ctttaggca gctcaaat agggagaac ccatttct gttgtctt aacagcag ccaacccat catctact tctgtggct ctttaggca gctcaaat agggagaac tgaagctgt tctcagag gctctgag acagctga ggtggagaa ggtggaggg ggttctca ggaagagac gagctgtc ggaagcagat ggaagagat cggccctg agaaagagat tggagagca tggctgtg ccacccctga caattatg catcttct agcctctg ctagaagaa tggctgtg	A	Homo sapiens
672	194858	G Protein-Coupled Receptor LS194858	ENSP00000053	QDTRHGNRC RAGCSNLT RKAQAQAIP APNSHACRLP LQDSPVPRK MTPNSTGEVP SPIPKGALGL SLALASLIIT ANLLALGIA GTAAACAATCW LLLPETAGW AAHSGGIATL PGLWNQRRG YWSCLLVLA PNFSFLSLA NLLL VHGERY MAVLRPLQPP GSIRLALLT WAGPLLFASL PALGWNHWTP GANCSSQAIF PAPYLEVY GLLLPVGA AFLSVRLAT AHRQLQDICR LERAVCRDEP SALARALTWR QARAQAGAML LFGLCWGPYV ATLLSVLAY EQRPLPGPT LLSLLSLGSA SAAAVPVAMG LGDQRYTAPW RQPPKGACRG CGEPPGTVP APALPTTQA KAVSTWT tcaggccag gaaagagtaa tcatggg cagagcactg gtagatgag tgggggggt tggatctaa tggatctcc atgttagcac agaaactgtg tggcagtaga gaaagagtag gcttagag cagcaagaac tggattcaa actggattg aggacccca cctttgata ggtgactat tctgtgtg tctgtgtt tccagggg accagactgg ggtttctgag gggtgggggaa atcagaagac atacagctgg tgaacaa tggtttctg tccagggg accagactgg ggtttctgag cagggatca accatccag tctgggtac agaaactgaca ccaatcaac gacgtgagga gactctgg tacaagcaga ccctgagcti cagggggctg acgtgcatg tttccgtg cggctgaca ggaacgggg tggctgtg gctctggg tggcagcag cagaggaacg tggctccat taccctca accgtgctg gggcggact cttctctta gggggccat taaatgtg ccgttagcc tcatcaat ccggccatcc atctcaaaa tctcagcc tggatgacc ttccctact ttatggct aagcagctg agcgccatca gcaaccagcg ctgctgtcc atctgtgg ccactggga cactggcc cggccagat accgtgac ggtagtgg gttctgtct gggccctgt cgtgtgctg agtatctgg agtggagt cgtgactc cgttagtg ggtgtgac tgggtggg gaaagtag atttatca aatggctgg ctgtgttt tatgtgtt tctgtggg tccagccctg tctgtgtg cagggatct tggggtccc ggaagatg gctgaccagg gtagagga ccatctct cacaagtgt gcttctcc tctgtggct gcccgtgg attaggggg cctgtttc caggaacac ctaggggct ctttaggca gctcaaat agggagaac ccatttct gttgtctt aacagcag ccaacccat catctact tctgtggct ctttaggca gctcaaat agggagaac tgaagctgt tctcagag gctctgag acagctga ggtggagaa ggtggaggg ggttctca ggaagagac gagctgtc ggaagcagat ggaagagat cggccctg agaaagagat tggagagca tggctgtg ccacccctga caattatg catcttct agcctctg ctagaagaa tggctgtg	P	Homo sapiens
673	194878	MrgX3 G Protein-Coupled Receptor	AY042215	tcaggccag gaaagagtaa tcatggg cagagcactg gtagatgag tgggggggt tggatctaa tggatctcc atgttagcac agaaactgtg tggcagtaga gaaagagtag gcttagag cagcaagaac tggattcaa actggattg aggacccca cctttgata ggtgactat tctgtgtg tctgtgtt tccagggg accagactgg ggtttctgag gggtgggggaa atcagaagac atacagctgg tgaacaa tggtttctg tccagggg accagactgg ggtttctgag cagggatca accatccag tctgggtac agaaactgaca ccaatcaac gacgtgagga gactctgg tacaagcaga ccctgagcti cagggggctg acgtgcatg tttccgtg cggctgaca ggaacgggg tggctgtg gctctggg tggcagcag cagaggaacg tggctccat taccctca accgtgctg gggcggact cttctctta gggggccat taaatgtg ccgttagcc tcatcaat ccggccatcc atctcaaaa tctcagcc tggatgacc ttccctact ttatggct aagcagctg agcgccatca gcaaccagcg ctgctgtcc atctgtgg ccactggga cactggcc cggccagat accgtgac ggtagtgg gttctgtct gggccctgt cgtgtgctg agtatctgg agtggagt cgtgactc cgttagtg ggtgtgac tgggtggg gaaagtag atttatca aatggctgg ctgtgttt tatgtgtt tctgtggg tccagccctg tctgtgtg cagggatct tggggtccc ggaagatg gctgaccagg gtagagga ccatctct cacaagtgt gcttctcc tctgtggct gcccgtgg attaggggg cctgtttc caggaacac ctaggggct ctttaggca gctcaaat agggagaac ccatttct gttgtctt aacagcag ccaacccat catctact tctgtggct ctttaggca gctcaaat agggagaac tgaagctgt tctcagag gctctgag acagctga ggtggagaa ggtggaggg ggttctca ggaagagac gagctgtc ggaagcagat ggaagagat cggccctg agaaagagat tggagagca tggctgtg ccacccctga caattatg catcttct agcctctg ctagaagaa tggctgtg	A	Homo sapiens

674	194878	MrgX3 G Protein-Coupled Receptor	AAK91806.1	675	194903	G Protein-Coupled Receptor GPCR3	LG100657	676	194904	Human GPCR3	677	194905	Human GPCR3	678	194906	Human GPCR3	679	194907	Human GPCR3	680	194908	Human GPCR3	681	194909	Human GPCR3	682	194910	Human GPCR3	683	194911	Human GPCR3	684	194912	Human GPCR3	685	194913	Human GPCR3	686	194914	Human GPCR3	687	194915	Human GPCR3	688	194916	Human GPCR3	689	194917	Human GPCR3	690	194918	Human GPCR3	691	194919	Human GPCR3	692	194920	Human GPCR3	693	194921	Human GPCR3	694	194922	Human GPCR3	695	194923	Human GPCR3	696	194924	Human GPCR3	697	194925	Human GPCR3	698	194926	Human GPCR3	699	194927	Human GPCR3	700	194928	Human GPCR3	701	194929	Human GPCR3	702	194930	Human GPCR3	703	194931	Human GPCR3	704	194932	Human GPCR3	705	194933	Human GPCR3	706	194934	Human GPCR3	707	194935	Human GPCR3	708	194936	Human GPCR3	709	194937	Human GPCR3	710	194938	Human GPCR3	711	194939	Human GPCR3	712	194940	Human GPCR3	713	194941	Human GPCR3	714	194942	Human GPCR3	715	194943	Human GPCR3	716	194944	Human GPCR3	717	194945	Human GPCR3	718	194946	Human GPCR3	719	194947	Human GPCR3	720	194948	Human GPCR3	721	194949	Human GPCR3	722	194950	Human GPCR3	723	194951	Human GPCR3	724	194952	Human GPCR3	725	194953	Human GPCR3	726	194954	Human GPCR3	727	194955	Human GPCR3	728	194956	Human GPCR3	729	194957	Human GPCR3	730	194958	Human GPCR3	731	194959	Human GPCR3	732	194960	Human GPCR3	733	194961	Human GPCR3	734	194962	Human GPCR3	735	194963	Human GPCR3	736	194964	Human GPCR3	737	194965	Human GPCR3	738	194966	Human GPCR3	739	194967	Human GPCR3	740	194968	Human GPCR3	741	194969	Human GPCR3	742	194970	Human GPCR3	743	194971	Human GPCR3	744	194972	Human GPCR3	745	194973	Human GPCR3	746	194974	Human GPCR3	747	194975	Human GPCR3	748	194976	Human GPCR3	749	194977	Human GPCR3	750	194978	Human GPCR3	751	194979	Human GPCR3	752	194980	Human GPCR3	753	194981	Human GPCR3	754	194982	Human GPCR3	755	194983	Human GPCR3	756	194984	Human GPCR3	757	194985	Human GPCR3	758	194986	Human GPCR3	759	194987	Human GPCR3	760	194988	Human GPCR3	761	194989	Human GPCR3	762	194990	Human GPCR3	763	194991	Human GPCR3	764	194992	Human GPCR3	765	194993	Human GPCR3	766	194994	Human GPCR3	767	194995	Human GPCR3	768	194996	Human GPCR3	769	194997	Human GPCR3	770	194998	Human GPCR3	771	194999	Human GPCR3	772	195000	Human GPCR3	773	195001	Human GPCR3	774	195002	Human GPCR3	775	195003	Human GPCR3	776	195004	Human GPCR3	777	195005	Human GPCR3	778	195006	Human GPCR3	779	195007	Human GPCR3	780	195008	Human GPCR3	781	195009	Human GPCR3	782	195010	Human GPCR3	783	195011	Human GPCR3	784	195012	Human GPCR3	785	195013	Human GPCR3	786	195014	Human GPCR3	787	195015	Human GPCR3	788	195016	Human GPCR3	789	195017	Human GPCR3	790	195018	Human GPCR3	791	195019	Human GPCR3	792	195020	Human GPCR3	793	195021	Human GPCR3	794	195022	Human GPCR3	795	195023	Human GPCR3	796	195024	Human GPCR3	797	195025	Human GPCR3	798	195026	Human GPCR3	799	195027	Human GPCR3	800	195028	Human GPCR3	801	195029	Human GPCR3	802	195030	Human GPCR3	803	195031	Human GPCR3	804	195032	Human GPCR3	805	195033	Human GPCR3	806	195034	Human GPCR3	807	195035	Human GPCR3	808	195036	Human GPCR3	809	195037	Human GPCR3	810	195038	Human GPCR3	811	195039	Human GPCR3	812	195040	Human GPCR3	813	195041	Human GPCR3	814	195042	Human GPCR3	815	195043	Human GPCR3	816	195044	Human GPCR3	817	195045	Human GPCR3	818	19504
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[illegible]Homo  
sapiens

**P**

**G Protein-  
Coupled Receptor  
GPCRB3**

676

677	194904	WO0034334- hFB41A	AX147788	<p>VLGSSTWSPV QLNINETKIQ WHGKNHQVPK SVCSSDCLEG HQRVVTGFHH            CCFECVPCGA GTFLNKSELY RCQPCGTEEW APEGSTQCFP RTVVFLALRE            HTSWVLLAAN TLLLLLLGT AGLFAWHLDT PVRSAGGRL CFLMLGSLAA            GSGSLYGFFG EPTRPACLLR QALFALGFTI FLSCLTVRSF QLIIFKFST KVPTFYHAWV            QNHGAGLFVM ISSAAQLLIC LTWL VVWTPL PAREYQRFPH LVMLECTETN            SLGLFLAFLY NGLLSISAF CSYLKDLPE NYNEAKCVTF SLLNFVSWI            AFFTTASVYD GKYLPAANMM AGLSSLSSGF GGYFFPLKCYV ILCRPDLNST            EHFQASIQDY TRRCGST</p> <p>gagacaatg atcttttga agtactigac ggtgtgttc ttagcggtca cgaagcacag agtgtgtgac atgtgtgtc tcatggcat            gcactgacg atgtagaagg cagttaggta gttcttcc ttacaaca cgttggggaa gaagtgcgc agatgggta            agccgtagaa gggcgccacg catagcagt aggcgggtgag gatgacatg agcaccagga ccgttctct ggcggcagcgc            agcctctgc ggtatgtc tttctggaat ccaggagacc ccttgaacca gtagctccgg gtagtcttgg catagcacag            ggtatgtg accacggggc ccacgaatc tatgccaag ataaaggaga agtaggact gtagtagagc tcttggcca            caggccagat ctggccgacg aagatcttt cttggtctt gacaatgac aggaacctc cgttgggtgaa gtaggcggaa            ggtatggcga ttaggatgga caccgtcc accaaggcaa ttaggcagat tggagggcag c            cgtatggaca atagccagat acctaggga agaacaaga tggagggcag c</p>	A	Homo sapiens
678	194904	WO0034334- hFB41A	LR114	<p>MGFMDDNATN TSTSLSVLN PHGAHATSP FNFSYSDYDM PLDEDEDVTN            SRTFFAAKIV IGMALVGIML VCGIGNFIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV            CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLYVSTNA LLAIDRYL            AIVHPLRPRM KCQTATGLIA LVWTVSILIA IPSAYFTTET VL VIVKSQEK IFCGQIWPVD            QQLYKSYFL FIFGIEFVG VVTMTLCYAR ISRELWFKAV PGFQTEQRK            RLRCRRKTVL VLMCILTAYV LCWAPFYGFT IVRDFFTVF VKEKHYLTAF            YIVECIAMSN SMINTLCFVT VKNDTVKYFK KIMLLHWKAS YNGGKSSADL            DLKTIGMPAT EEVDCIRLK</p> <p>ggcacagagg gccggccgc atgtggagct gcaagctggt caacggcaca gggctgggtgg agggagctggc tggctggcag            gacctggcag tggggctgt actgtgtg ctgtgggc tgggtgggtgg cgtggcaggt ggcctgtgt acaagccct            gctgggtgtg gccaacctac acagcaaggc cagcatgacc atggcggagc tgtacttgt caacatggca gtagcaggcc            tgggtgtcag cggccctggcc cctgtgcatc tggctggccc cccggagctcc cgttgggtggc tgggtgggtgaa            gtccacgtgg cactgcaagt cccctcaat gttctctac tgggtggccat gttctccac gcccgtctga gcttggacca            ctacatggag cgtgcacatg cggcgacctt cagggccagc ggttacaaca cggcgccagt gttgggtgtc gttgggtgtg            ggcgctgtgt gacagctc tcttctgt tcttctat ctggagccat gtttccacc ggcggttaga gttggccaag            atgcaagaac cagaagctgc cgaagccagc ctgtgtgtca tgggtgtgct ggttgcagca ctggccaacc tctagcgt            ggtgtgtact tcccggtcc gcaaggagga cagcccccgt gacgggggaca cgggcgggtgt gtagccctgg gacacaggc            tcttgggtgg caccgtgtg acgcaatttg ggtctggac gccaactat ctgactgtg tggggcacac ggtcaltc            tggcgaggga agccgtgtga cgcacatc cgggggtctac tgcatttgt gtaggttttcc tccaaactcc tggccttctc            cagcgagcttt gtagacacc tttctacc tttctacc cagatgaac cagagcttcc cagcagctt ccaaggtgt atgaaagc            tggcctgggt gtagccggcacc tggccccc accatgggt ggtgtgagca gttgtgggt agggcggtcca ggccttgg            gtagagctga cttgtgtg cgaagcac ttatgaccc tggagcttcc ccaactct ccagaaaggag acgagctgt            gtagagagag cagaggggt gttttctg aagtttctt ttccacaa atgccaact tggggcaggc ctgtgtgtcc            cgttggctggc atctggctgt agtctcccg agggctgtgt gttctccaaa cagcgagctc aagggtccaca tctgcaaaag</p>	P	Homo sapiens
679	194905	G Protein- Coupled Receptor MGC7035	BC014241	<p>ggcacagagg gccggccgc atgtggagct gcaagctggt caacggcaca gggctgggtgg agggagctggc tggctggcag            gacctggcag tggggctgt actgtgtg ctgtgggc tgggtgggtgg cgtggcaggt ggcctgtgt acaagccct            gctgggtgtg gccaacctac acagcaaggc cagcatgacc atggcggagc tgtacttgt caacatggca gtagcaggcc            tgggtgtcag cggccctggcc cctgtgcatc tggctggccc cccggagctcc cgttgggtggc tgggtgggtgaa            gtccacgtgg cactgcaagt cccctcaat gttctctac tgggtggccat gttctccac gcccgtctga gcttggacca            ctacatggag cgtgcacatg cggcgacctt cagggccagc ggttacaaca cggcgccagt gttgggtgtc gttgggtgtg            ggcgctgtgt gacagctc tcttctgt tcttctat ctggagccat gtttccacc ggcggttaga gttggccaag            atgcaagaac cagaagctgc cgaagccagc ctgtgtgtca tgggtgtgct ggttgcagca ctggccaacc tctagcgt            ggtgtgtact tcccggtcc gcaaggagga cagcccccgt gacgggggaca cgggcgggtgt gtagccctgg gacacaggc            tcttgggtgg caccgtgtg acgcaatttg ggtctggac gccaactat ctgactgtg tggggcacac ggtcaltc            tggcgaggga agccgtgtga cgcacatc cgggggtctac tgcatttgt gtaggttttcc tccaaactcc tggccttctc            cagcgagcttt gtagacacc tttctacc tttctacc cagatgaac cagagcttcc cagcagctt ccaaggtgt atgaaagc            tggcctgggt gtagccggcacc tggccccc accatgggt ggtgtgagca gttgtgggt agggcggtcca ggccttgg            gtagagctga cttgtgtg cgaagcac ttatgaccc tggagcttcc ccaactct ccagaaaggag acgagctgt            gtagagagag cagaggggt gttttctg aagtttctt ttccacaa atgccaact tggggcaggc ctgtgtgtcc            cgttggctggc atctggctgt agtctcccg agggctgtgt gttctccaaa cagcgagctc aagggtccaca tctgcaaaag</p>	A	Homo sapiens





682	194907	G Protein- Coupled Receptor 14273	LR116	<p>TCCCAGCAGT TTGGGCTGAG GTGGGTGGAT CACCTGAGGT CAGGAGTTCG  AGACCAACCT GACCAACATG GTGAGACCCC CGTCTCTACT AAAAATAAAA  AAAAAAATTA GCTGGGAGTG GTGGTGGGCA CCGTAATCC TAGCTACTTG  GGAGGCTCAA CCACGAGAAAT CTCITGAACC TGGGAGGCA GAGTTCAGT  GAGCCGAGAT CGTGCCATTG CACTCCAACC AGGGCAACA GAGTGAAACT  CCATCTTAAA AAAAAAATAA AAGATTGT TATGGGTTC TTTTAAATGT  GAACTTTTIT AGTGTGTTG TATATGATCA AATTATAA ATATTATTT  ATGACTGTC AGCAAAAAA AAAAAAATA AGGGCGG  MSPECARAAG DAPLRSEQA NRTRFFSD VKGDHRL VLA AVETTVLVL  FAVSLGNVC ALVLVARRR RGATACLVN LFCADLLFIS APLVLA VRW  TEAWLLGPVA CHLLFYVMTL SGSVTILTLA AVSLDRMVC VMLQRGVRC  GRRARAVLLA LIWGYSAAA LPLCVFFRV PQLPGADQE ISICTLIWPT  IPGEISWDVS FVTNLNLPV LVIIVSYSKI LQTTKASRK LTVSLAYSRS HQIRVSQDF  RLFRITFLM VSFIMWSP IIDLILLIQ NFKQDLVIWP SLPPVWVAPT FANSALNPIL  YNNILCRNEW KKIFCCTWFP EKGAILTDS VKRNDLSIIS G  ITYSAISDEL RDKVRFPALL RTTPSADHHV EAMVQLMLHF RWNWIVLVS  SDTYGRDNGQ LLGERVARRD ICIAFQETLP TLQPNQNMST EERQRLVTIV  DKLQOSTAR VVVFSPDLTL YHFFNEVLQ NFGAVVWIAS ESWAIDPVLH  NLTELGHILGT FLGITIQSV IPGFSEFREW GPQAGPPPLS RTSQSYTCNQ  ECDNCLNATL SFNTILRLSG ERVVYSVYA VYAVAHALHS LLGCDKSTCT  KRVPYPWQLL EEWKVNFTL LDHQFFDPQ GDVALHLEIV QWQWDRSQNP  FQSVASYPL QRQLKNIKTS LHTVNTTPM SMCSCRQSQG QKKKPVGIHV  CCFECIDCLP GTFLNHTCP NNEWSYQSET SCFKRQLVFL EWHEAPTIAV  ALLAALGFLS TLAILVFWR HFQTPIVRSA GGPMCFMLLT LLLVAYMVVP  VYVGPVKVST CLCRQALFPL CFTICISIA VRSFQIVCAF KMASRFPRAY  SYWVRYQGPY VSMFATVVK MVIVVIGMLA RPQSHPRIDP DDPKITTIVSC  NPNYRNSLLF NTSLDLALLSV VGFSFAYMGK ELPTNYNEAK FITLSMTIFYF  TSSVSLCTFM SAYSGVLVTI VDLLVTVLNL LAISLGYFGP KCYMILFYPE  RNTPAYFNISM IQGYTMRRD</p>	P	Homo sapiens
683	194908	G Protein-coupled Receptor Gpcrb4	LR117	<p>atgagcagca attatccct gctggggct ggcagcgt gctacgcgaa cggaaatggg tccgtgtgga aaatccct  ctgcgggga tccgggga tictgacat agtgtggc ttggggctg tgcgtgctgt gtttggaac ctcctggga tgaatcaat  ctccattc aagcagcgc actctcgac caattctc gtgcctctc tggcctgcgc tgaattctg gtcgggtgga cgtgagcc  cttcagcat gtcaggacgg tggagagctg cttgattt gggaagagt ttgattct ccacacctg tggatggg catttga  ctctctc ttactgt gctcctc cctgacagc tacattggg ttactgacc cctgctat cctaccagt taccgtalc  tgtgcagga attgcatca gcgtgctg gatcctgccc ccatgata gcggtgctgt gttacaca ggtgtcgt acgatggct  ggaggaatta tctgagccc taaactgt agggaggtgt cagaccgtg taaatacaaa cgggtgtg acagattt tatcttct  tatactacc ttatttga taattctga tggtaacata ttctgtgg ctgacgaca ggcgaataag atagaaata cgtgtagcaa  gacagaatca tctcagaga gttacaagc cagatggcc aggaagaga gaaagcagc taaacctg ggggtcacag  tggtagcatt tatgattca tggtagcatt atagcattga ttactaat gatgcctta tggcttatt aacctgccc tgaattatg  agattgtg tgggtgtct tatataact cagccatgaa tcttgatt tatgttat ttaccatg gtttaggaaa gcaataaaag</p>	P	Homo sapiens
684	194957	Trace Amine Receptor 4 (TA4)	AF380192		A	Homo sapiens

685	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	<p>ttattgaac tggcagggt ttaagaaca gtcagcaac catgaattg ttcttgaac atataaa  MSSNSSLLVA VQLCYANVNG SCVKIPSPG SRVILYVFG FGAVLAVFGN  LLVMISILHF KQLHSPTNFL VASLACADEL VGVTVMPFSM VRTVESCWFY  GRSCTFHTC ODVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSUSG ICISVSWILP  LMYSGAVFYT GVDYDGLLEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT  FIMULYGNL FLVARRQAKK IENTGSKTES SSESYSKARVA RRERKAAKTL  GVTVAFMIS WLPYSIDSLI DAFMGFITPA CIYEICCWCA YNSAMNPLI  YALFYPWFRK AIKVVITGVQV LKNSSATMNL FSEHI</p>	P	Homo sapiens
686	194958	Trace Amine Receptor 5 (TA5)	AF380193	<p>atgacagca attitcca acctgtgtg cagcttctg atgaggatgt gaaaggatct tgaatgaac ctccattc tcttgggtcc  cgggtaatc tgaacaggc gtttagctt gggcttctg tggctgatt tggaaatc tgaataiga ctctgtct tcatttaag  cagctgcaat ctcaacaaa ttctcat gctctctgg cctgtctga ctcttggta ggtgtgacig tgaatctt cagcatggic  aggacggigg agagctgtg gtaatttga gccaaattt gtaactica cagtgctgt gatgtggcat ttgttact ttctgtctc  cactgtgt tcatgtcat cgaacagtlac atgtgtgta ctagtccct ggtatgtct accaagtica cgtgtctgt gtcggggaat  tgcatacgg tgcctgtct acgtacagcg gtcgtgtct ctacaggt gtcagatgt atggcttgg  ggaattagta agtgcctca acgtgttag tggctgtcaa atattgata gtcagagcg ggtgtgata gatttctgt tattctcat  acctaacct gtaataaa ttcttacag taagatttt ctatagcta aacacagc tataaaaa gaaactacta gtagcaaat  agaatcalcc tcagagagt ataaatcag agtggccaag agagagagga aagcagctaa aaccttgggg gtcacggta  tagcaattgt tatttctg ttacgtata cagttgatat attaatgt gcttctgg gcttctgac cctgtctat atctatgaa  ttgtgtgt gtagtctat tatactcag ccatgaatcc ttgatatt gctatatt atcttgtt taggaaagcc ataaactta  tttaagtgg agatgtta aagctagt catcaacct tagttatt tgaataa</p>	A	Homo sapiens
687	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	<p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVLYTAFSF GSLLAVFGNL  LVMTSVLHFQ QLHSPTNFLI ASLACADELV GVTVMFLSMV RTVESCWFYF  AKFCTLHSCC DVAFCYSSL HLCFCIDRY IVVTDPLVYA TKFTVSUSGI CISVSWILPL  TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWVLI DFLFFIPTL VMILYSKIF  LIAKQQAIKI ETTSSKVESS SESYKIRVAK RERKAAKTLG VTVLAFVSW LPYTVDDLID  AFMGFLTPAY IYEICWSAY YNSAMNPLY ALFYPWFRKA IKLILSGDVL  KASSTISLFL</p>	P	Homo sapiens
688	194989	MrgX4 G Protein-Coupled Receptor	AY042216	<p>tgcattgt tcttctct ccatggatga ccagctctag tcacagagt gtcacaoca cctcttgg tatttgaat cctccacctg  aaagaaaat tcagaccag gataatata tcatgggtc caaagccctg gccgagtag tgggggtgt ttgatctaa  tgttattcc atgtacac agaactgt tgcagtaga gtagatgtcag gcttcaagt caacaagaac tggattcaa  actggatttg aggaaccca ccttggtaa gtagattat atctggagc ctctgttct ctcttita aatgaggaaca gtaaatocca  tacggcagg tgggggag aatcagat gatacagctg gtagacat ctgttctg ttccagggg caacagacta  gatttctga gcatgatac aacgtocca gcttctgta caaacctg accaataac ggaactgagg agactctgt  ctacaatcag acctgagct tccgtgtgt gactgtcalt atttccct tgggactgac aggaacagcg gtagtctct  ggctctggg ctaccgctg cgcaggagc cgtctccat ctacatcct aaccttggcg cagcagacti ccttcttc  agcttccaga ttacgtic gcatcagc ctacataa tcagccatct catccgcaa atctctgt ctgtgtagc ctctccctac  ttacaggcc tgaatgtct gtagcgcalt agcaacagc gctgtctg tgtctgtgg ccatctgtt accgtggcg  ccgcccaca cactgtcag cggctgtgtg tgtctgtc tggggctgt cctgtgtt ttatgtctg gtagtggagt tctgtgact  cctgttatt ggtgtgtat ctatgtgtg tgaacgtca gatttacc cagctgtg gctgtatt ttatgtgtg ttctgtgt  ttcagctg gctctgtg tcaagatct ctgtggatcc cggagagtc cgtgtgaccag gctgtgactg accatctg</p>	A	Homo sapiens

689	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	<p>tcacagtgct ggctctctc ctctggggcc tgccttcgg cattctgggg gcoctaatti acaggatgca cctgaatttg gaagtcttat atgtcatgt ttaictgggt tgcattgccc tgcctctct aaacagatagt gcaacoccca tcaattact cttcgtgggc tcccttaggc agcgtcaaaa taggcagaac ctgaagctgg ttctccagag ggctctgag gacaagccctg aggtggataa aggtgaaggg cagcttcttg aggaagacct ggaagctgctg ggaagcagat tggggccatg agggagagcc tctgcoctgt cagtcagacg ggacttgag agcaacactg tctggcaac ctgacaati acatggctt ttctagctg ttgcctcag aaatgtctca gtggttaact aaggcttca aataaagt tatcaacct gacatgca gttttcaac ttggaaga ttagctgac agtacaagt tigg MDPTVPVFGT KLTPINGREE TPCYNQTL SF TVLTCTISLV GLTGNAVVLW P Homo LLGYRMRRNA VSIYILNLA ADFLFLSFQI IRSPRLINI SHLRKILVS VMTPFYFTGL sapiens SMLSAISTER CLSVLWPIWY RCRRPHTLSA VVCVLLWGLS LLFSMLEWRF CDFLFGADS SWCETSDFP VAWLIFLCVV LCVSSLVLLV RILCGSRKMP LTRLVVTLL TVLVFLLCGL PFGILGALY RMHLNLEVLV CHVYLVCMSL SSLNSSANPI IYFFVGSFRQ RQNRQNLKLV LQRALQDKPE VDKGEGQLPE ESLELSGSRL GP</p>	
690	195015	G Protein- Coupled Receptor GPR82	AF411111	<p>atgaacaaca atacaacatg tatcaacca tctatgatct ctccatggc ttaccaatc attacaacc tcccttgat tcttggtgt ttggaaaca ctctctca atggatatt ttacaaaaa taggtaaaaa aacatcaacg cacatctacc tgcacaccc tggactgca aacttactg tggcagctg cagctcttc atgagatct attctgaa aggtttccaa tgggaatata aatctgctca atgcagagtg gtcaatttc tgggaactct atccatgcat gcaagatgt tigtacgt ctaatttga agttggatg ccataagccg ctatgctacc ttaatgcaa aggatctctc gcaagagact actcatgct atgagaaaaa attttatggc cattactga aaaaatttcg ccagoccaa ttttagaa aactatgcat ttacatagg ggaagtgtac tgggcataat cattocagt accgtatact actcagtcac agaggctaca gaaaggagaag agagccatg ctacaatgg cagatggac tagggaccaat gatctctcag attcaggtc tcatgggaac cacatttatt ggattttct tttagtagi actaacaatca tactactct ttgtaagcca tctgagaaaa ataaagaacct gtacgtccat taaggagaaa gatitgactt acagtctgt gaaagacat ctttgggca tccagatct actaatgt tgcctcttc ctatagat tttaaaccc atttttag ttctacaca aagagataac tgtcagcaat tgaattatt aalagaaca aaaaacatc tcaactgct tgcctggcc agaagtagca cagaccccat tatattct ttatagaca aaacatcaa gaagacacta tataatctct ttacaaagt taatcagca catatgcaat catatggtg a</p>	Homo sapiens
691	195015	G Protein- Coupled Receptor GPR82	AAL26482	<p>MNNNTTCIQP SMISSMALPI IYLLCIVGV FGNTLSQWIF LTKIGKKTST HIYLSHLVTA P Homo NLLVCSAMPF MSYFLKGFQ WEYQSAQCRV VNFLGTL SMH ASMFVSLIL sapiens SWIAISRYAT LMQKDSQET TSCYEKIFYG HLLKKFRQPN FARKLCIYW GVVLGIIIPV TVYYSVIEAT EGEESLCYNR QMELGAMISQ IAGLIGTTFI GFSFLVVLTS YYSFVSHLRK IRTCTSIMEK DLTYSSVKRH LLVIQILLIV CFLPYSIFKP IFYVLHQRDN CQQLNYLIET KNILTCLASA RSSTDPIIFL LLDKTFKKTL YNLFTKNSA HMQSYG</p>	

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	Species
1	127	5-HT1A Receptor	NM_000524	atggatgtgc tcagccctgg tcagggaac aacaccacat caccaccggc tcccttgag accggcgga acactactgg tatctccgac gtgacctga gctaccaagt gatacctct ctgctgtgg gacgtctcat ctctgcgcg gtgctggga atgctgctg ggtggctgct atcgccctgg agcgctccct gcagaacgtg gccaatatc ttattggctc ttggcggtc accgacctca tgggtgctgg gtggtgctg cccatggccg cgtgtatca ggtgctaac aagtggacac tgggccaggt aacctgcgac ctgttcacg cctcgacgt gctgtgctg acctcatcca tcttgacact gtgcgccatc gcgctggaca ggtactggg catcacggac cccatcgact acgtgaacaa gagagcggc cgccgcgctg cgctcatctc gctcattgg cttattggct tctcatctc tatccggcc atcctgggct ggcgcacccc ggaagaccgc tcggaccgg acgcatgcac cattagcaag gatcatggct acatatcta ttcaccttt ggagctttct acatcccgct gctgtcatg ctggttctct atggcgcat attccgagct gcgcgttcc gcatccgcaa gacgtcaaa aaggtggaga agaccggagc ggacacccgc catggagcat ctcccgccc gcagcccaa aagagtgtga atggagagtc ggggagcagg aactggaggc tggcgctgga gacaaaggct ggggtgctc tgtgcgcaa tggcgcggtg aggcaaggtg acgatggcg cgcctggag gtgctcgag tgcaccagt gggcaactcc aaagagcaat tgcctctgccc cagcaggct ggtcctacc ctgtgcccc cgctcttct gagaggaaa atgagcgcaa gcgcgaggc aagcgcaaga tggccctggc ccgagagagg aagacagtga agcgtctgg catcatcatg ggcacctca tctctgctg gctgccttc ttcatctgg ctctgttct gcccctctgc gagagcagtc gccacatgcc caccctgtg ggcgccataa tcaattggct gggctactcc aactctctg ttaaccccg catttacga tacttcaaca aggactttca aaacgcgtt aagaagatca ttaagtgtaa ctctgccc cagtga	A	Homo sapiens
2	127	5-HT1A Receptor	NP_000515.1	MDVLSPGQGN NTTSPAPFE TGGNTTGISD VTVSYQVITS LLLGLTIFCA VLGNACVWAA IALERSIQNV ANYLIGSLAV TDLMSVLI VL PMAALYQVLN KWTLGQVTC LFTALDVLCC TSSILHLCAI ALDRYWAID PIDYVNRTP RPRALISLTW LIGFLISIPP ILGWRTPEDR SDPDATISK DHGYTIYSTF GAFYIPLLLM LVLYGRIFRA ARFRIRKTVK KVEKTGADTR HGASPAQPK KSVNGESGR NWRLGVESKA GGALCANGAV RQDDGGALE VIEVHRVGN KEHLPLPSEA GPTPCAPASF ERKNERNAEA KRKMALARER KTVKTLGIIM GTFILCWLPF FIVALVLPFC ESSCHMPTLL GAINNLWLGYS NSLLNPVIYA YFNKDFQNAF KKIICNFCR Q	P	Homo sapiens
3	128	5-HT1B Receptor	NM_000863	atggagggaac cgggtgctca gtgcgctcca ccgcgcggccg cgggctccga gacctgggtt cctcaagcca acttatectc tgctccctcc caaaactgca gcgccaagga ctacatttac caggactcca tctccctacc ctgaaaagta ctgctgggta tgctattggc gctcatcacc ttggccacca cgtctcccaa tgccttctgt atggccacag tgtaccggac ccggaactg cacacccgg ctaactacct gatgcctct ctgcccgtca ccgacctgt tgtgtccatc ctggtgatgc ccatcagcac catgtacact gtcacggcc cgtggacact gggccagggtg gtctgtgact tctggctgtc gtcggacatc acttgttgca ctgcctccat cctgcacctc tgtgtcatcg ccctggaccg ctactgggccc atcacgacg ccgtggagta ctacgctaaa aggactccca agagggcggc ggtcatgac gcgctgtgt ggtctcttc catctctatc	A	Homo sapiens

4	128	5-HT1B Receptor	NP_000854.1	<p> tgcgtgcgc cctttctctg gcgtcaggct aaggccgaag aggaggtgtc ggaatgcgtg  gtgaacacg accacatcct ctacacggct tactccacgg tgggtgcttt ctacttcccc  accctgctcc tcatcgccct ctatggccgc atctacgtag aagcccgctc cggattttg  aaacagacgc ccaacaggac cggcaagcgc ttgaccggag ccagctgat aaccgactcc  cccggtcca cgtctcgggt cactctatt aactcgggg ttcccagcgt gccagcgaa  tccggatctc ctgtgtatgt gaaccaagtc aaagtgcgag tctccgacgc cctgctggaa  aagaagaac tcatggccgc tagggagcgc aaagccacca agaccctagg gatcatttg  ggagccttta ttgtgtgtg gctacccttc ttcacatct ccttagtgat gcctatctgc  aaagatgcct gctggttcca cctagccatc tttagactct tcacatggct gggctatctc  aactccctca tcaaccccat aatctatacc atgtccaatg aggactttaa acaagcattc  cataaactga tacgttttaa gtgcacaagt tga  MEEPQAQCAP PPGAGSETWV PQANLSSAPS QNCSAKDYIY QDSISLPWKV LLVMLLALIT P  LATTLSNAFV IATVYRTRKL HTPANYLIAS LAVTDLLVSI LVMPISTMYT VTGRWTLGQV  VCDFWLSSDI TCCTASILHL CVIALDRYWA ITDAVEYSK RTPKRAAVMI ALVWVFSISI  SLPPFFWRQA KAEDEVSECV VNTDHILYTV YSTVGAFYFP TLLLIALLYR IYVEARSRL  KQTPNRTGKR LTRAQLITDS PGSTSSVTSI NSRVPDVSE SGSPVYNQV KVRVSDALLE  KKKLMAAPER KATKTLGIIL GAFIVCWLPF FIISLVMFIC KDACWFHLAI FDFFTWLGYL  NSLINPIYT MSNEDEKQAF HKLIRFKCTS </p>	Homo sapiens
5	129	5-HT1D Receptor	NM_000864	<p> agccaaatgt gtggaggtct gtgggaagag agagccacct agcatgtccc cactgaacca A  gtacgagaa ggccttcccc aggagcctc caacagatcc ctgaatgcca cagaacacctc  agaggttgg gatccacaga cctccaggc gtcacagta tcccttgccg tggctcttcc  cgtcatcaca ctggccacag tctctccaa tccctttgta ctcaccacca tcttactcac  caggaagctc cacacccctg ccaactacct gattggctcc ctggccacca cggacctctt  ggtttccatc ttggtaatgc ccatcagcat cgcctatacc atcacccaca cctggaaactt  tgcccaaatc ttgtgtgaca tctggctgtc cctgacatc acgtgctgca cagctcccat  cctgcatctc tgtgtcattg ccttgacag gtactgggca atcacagatg ccttggaata  cagtaaacgc aggacggctg gccacggcg caccatgatc gccattgtct gggccatctc  catctgcac tccatcccc cgtctctctg gcggcaggcc aaggcccgagg agagatgtc  ggactgtctg gtgaacacct ctcagatctc ctacacatc tactccacct gtggggcctt  ctacattccc tcgggtgtgc tcatcatcct atatggccgg atctaccggg ctgcccggaa  ccgcacctcg aatccacct cactctatgg gaagcgttc accacggccc acctcatcac  aggctctgcc gggctcctgc tctgctcgt caactccagc ctccatgagg ggcactcgca  ctcggctggc tccctctct ttttcaacca cgtgaaatc aagcttgctg acagtgcctt  ggaacgcaag aggatttctg ctgctcgaga aaggaagcc actaaaatcc tgggcatcat  cttgggggcc ttatcatct gctggctgcc ctctctctg gtgtctctg tccctccccat  ctgcccggac tctgtctgga tccacccgga cactgtgtt aatgaagagt ttcggcaagc  tttaaaactcc ctcataaact caataatcta cactgtgtt tcttccacct ggttaggcta  ttttcagaaa attgtccctt tccggaagcc ctcctagtct tattcgatga ggtaaagaaa  MSPLNQSAEG LPQEAENRSL NATETSEAWD PRTLQALKIS LAVLSVITL ATVLSNAFVL P  TTILLTRKLH TPANYLIGSL ATTDLLVSI VMPIIAYTI THTWNFGQIL CDIWLSSDIT  CCTASILHLC VIALDRYWA TDALEYSKRR TAGHAATMIA IVWAISICIS IPPLFWROAK </p>	Homo sapiens
6	129	5-HT1D Receptor	NP_000855.1		Homo sapiens

7	130	5-HT1E Receptor	NM_000865	atcgaatgtt gagagaagca gtgctctgat ccagctcagg agaaaaagga gcgggttccg A agtgagactt ctggagccag ctggactgac cggtttgcc agtcggcgc gctgcacgc accgtccaca agagtctcag tcgccaggc tggagtgacg cagcacagtc tcacctcatt gcaacctcg cctccgggt tcgcgggttc tcgcctcag cttccctagta gctgggattg caggcaactca ccacctatcc cggctaattt ttgaaattt tagtggagac gggatttcac catgttgccc atgctggtct tgaacccccg acctcggatg attcgccccg ctcggcctcc caaagtgtcg gaattacagg cgaaccttca ctcagaagaa atgctgtggc ccttccctt accaacagaa aatggaacac aagagaccac atagctgaac aaattatagc ctcctacaa gtgagaaacc ttcgaggcta catagtttcc agccaaaagga aaataaccaa cagcttctcc acagtgtaga ctgaaacaaag gaaacatga acatcacaaa ctgtaccaca gaggcagca tggctataag acccaagacc atcactgaga agatgctcat ttgcatgact ctggtgtgca tcaccacct caccacgttg ctgaacttgg ctgtgatcat ggctattggc accaccaaga agctccacca gctgccaac taactaatct gttctctggc cgtgacggac ctctggtgg cagtgtcgt catgccccg agcatcatct acattgtcat ggatcgctgg aagcttgggt acttctctg tgaggtgtgg ctgagtgtgg acatgacctg ctgcacctgc tccatctcc acctctgtgt catgccccg gacaggtact gggccatcac caatgtctatt gaatacgcca ggaagaggac ggcacaagag gccgcgtga tgactcttac cgtctggacc atctcattt tcactctcat gccctctg ttctggagaa gccaccgcg cctaaagccct cccctagtc agtgcacct ccagcacgac catgttatct acaccattta ctcacgctg ggtgcgtttt atatccctt gactttgata ctgattctct attaccggt ttaccacgcg gccaaagacc ttaccagaa aggggatca agtcggcact taagcaacag aagcacagat agccagaatt ctttgcaag ttgtaaactt acacagactt tctgtgtgc tgacttctcc acctcagacc ctaccacaga gtttgaagaag ttccatgctt ccatcaggat ccccccttc gacaaatgatc tagatcacc ccaggaaact cagcagatct ctgacaccag ggaacggaag gcagcacgca tcctggggct gattctgggt gcattcattt tatcctggct gccatttttc atcaaaagat tgattgtggg tctgagcatc tacacogtgc cctcggaagt ggcgacttt ctgacgtggc tcggttatgt gaattctctg atcaaccctc tgctctatc gagttttaa gaagacttta agctggcttt taaaaagctc attagatgcc gagagcctac ttgactgta aaaagctaaa aggcacgact tttccagag cctcatgagt ggaagggggg aaggggtgca acttattaat tcctgaacat acttggttca ggagagtttg taagtatgtg tggctctgtt tcttgtttg tttgtttgt ttgttctgt ttgtttgag attgttattt ggcgtgctgt tttctacctc tggctttatc tgtgatacat aatttcaat aaacattatc atacaaaaa aaaaaaaaaa aaaaaaaaa	Homo sapiens
8	130	5-HT1E Receptor	NP_000856.1	MNITNCTTEA SMAIRPKTIT EKMLICMTLV VITTLTLLN LAVIMAIGTT KKLHQPNYL P ICSLAVTDLL VAVLVMPLSI IYIVMDRWKL GYFLCEVWLS VDMTCCTCSI LHLCVIALDR YWAITNAIEY ARKRTAKRAA LMILTWTIS IFISMPPLFW RSHRRLSPPP SOCTIQHDHV IYTIYSTLGA FYIPLTLILI LYRIYHAAK SLYQKRGSSR HLSNRSTDSQ NSFASCKLTQ	Homo sapiens

9	131	5-HT1F Receptor	NM_000866	<p>TFCVSDFTS DPTTEFEKFH ASIRIPPFDN DLDHGPGRQQ ISSSTRERKAA RILGLILGAF ILSWLPFFIK ELIVGLSIYT VSSEVADFLT WLGYNVNSLIN PLYTSFNED FKLAFFKLIR CREHT</p> <p>atggatttct taaattcatc tgatcaaaac ttgacctcag aggaactgtt aaacagaatg A ccatccaaaa ttctggtgtc cctcaactctg ttctgggtgg cactgatgac acaactatc aactcccttg tgatcgctg aattatttg acccggaagc tgcaccatcc agccaatat ttaaatttgg ccttgagcgt cacagatttt cttgtggctg tctggtgat gcccttcagc attgtgtata ttgtgagaga gagctgatt atggggcaag tggctctgtga catttggctg agtgttgaca ttacctgctg cactgctcc atcttgcac tctcagctat agctttggat cgttatcgag caatcacaga tgcgtttgag tatgccagga aaaggactcc aaagcatgct ggcattatga ttacaatagt ttggattata tctgttttta tctctatgcc tctctattc tggaggcacc aaggaaactag cagagatgat gaatgcatca tcaagcacga ccacattgtt tccaccattt actcaacatt tggagcttcc tacatcccac tggcattgat ttgatcctt tactacaaaa tatatagagc agcaagagaca ttataccaca agagacaagc aagtaggatt gcaaaggagg aggtgaatgg ccaagtctct ttggagagtg gtgagaaaaa cactaaatca gttccacat cctatgtact agaaaagtct ttatctgacc catcaacaga ctttgataaa attcatagca cagtgaagag tctcaggtct gaattcaagc atgagaaatc ttggagaagg caaaagatct caggtacaag agaacggaaa gcagccacta ccttgggatt aatcttgggt gcatttggtaa tatgttggct tctttttttt gtaaaagaat tagttgttaa tgcctgtgac aaatgtaaaa ttctgaaaga aatgtccaat ttttggcat ggcttgggta tctcaattcc cttataaaatc cactgattta cacaattctt aatgaagact tcaagaaagc attccaaaaa cttgtgcgat gtcgatgtta g</p> <p>MDFLNSSDQN ITSEELNRM PSKILSITL SGLALMTTII NSILVIAIIV TRKLHPANY P LICSLAVTDF LVAVLVMPFS IVYIVRESWI MGQVVCIDIWL SVDITCCTCS ILHLSAIALD RYRAITDAVE YARKRTPKHA GIMITIVWII SVFISMPPLF WRHQGTSRDD ECIKHDHIV STIYSTFGAF YIPLALILIL YKIYRAAKT LYHKRQASRI AKEEVNGQVL LESEKSTKS VSTSYVLEKS LSDPSTDFDK IHSTVRSILRS EFKHEKSWRR QKISGTRERK AATTGLILG AFVICWLPFF VKELVWNVCD KCKISEMSN FLAWLGYLNS LINPLIYTIF NEDFKKAFQK LVRRC</p>	Homo sapiens
10	131	5-HT1F Receptor	NP_000857.1	<p>gaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataacc tgttagtctt tctacacctc atctgctaca agttctggct tagacatgga tattcttggc gaagaaaaata cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacac aggtcttaca gtaatgactt taactctgga gaagctaaaca cttctgatgc atttaactgg acagtcgact ctgaaaaatcg aaccacacct tctgtgaag ggtgcctctc accgtcgtgt cctccttac ttcactcca ggaaaaaaac tggctgctctt tactgacagc cgtagtgtatt attctaacta ttgctgggaa catactctgc atcatggcag tgcctctaga gaaaaagctg cagaatgcca ccaactattt gttagtgtea cttgccatag ctgatattgt gctgggtttc cttgtcatgc cagtgtccat gttaaccatc ctgtatgggt accgtggccc tctgccgagc aagctttgtg cagctgtgat ttacctggac gtgctcttct ccacggcctc catcatgcac cctctgcgca tctcgtgga ccgctacgtc gccatccaga atcccatcca ccacagcgcg ttcaactcca gaactaaggc</p>	Homo sapiens
11	132	5-HT2A Receptor	NM_000621		Homo sapiens





13	133	5-HT2B Receptor	NM_000867	<p>MLLGFLVMPV SMLTILYGYR WPLPSKICAV WIYLDVLFST ASIMHLCAIS LDRYVAIQNP  IHHSRFNSRT KAFKLIIAVW TISVIGISMPI PVFGLQDDSK VPEKGSCLLA DDNFVLIGSF  VSFFIPLTIM VITYFLTIKS LQKEATLCVS FSFLPQSSLS SEKLFQRSIH  REPGSYTGRR TMOQISNEQK ACKVLGIVFF LFVVMWCPFF ITNIMAVICK ESCNEDVIGA  LLNVEFWIGY LSSAVNPLVY TLENKTYRSA FSRYIQCYK ENKKPLQLIL VNTIPALAYK  SSQLQMGQKK NSKQDAKTTD NDCSMVALGK QHSEASKDN SDGVNEKVSC V</p> <p>tactaacat gctgaccact gtctggaacg ggattgaatc acagaaaaac agcaaatggc A  tctctcttac agagtgtctg aacttcaaaag cacaattcct gagcacattt tgcagagcac  ctttgtttcac gttatctctt ctaactggctc tggattacag acagaatcaa taccagagga  aatgaaacag attgttgagg aacagggaagaa taaactgcac tgggcagctc tctgtatact  catggtgata ataccacaaa ttggtggaagaa taccctgtt attctggctg ttactactga  gaagaagctg cagtatgcta ctaattactt tctaattgctc ttggcgggtg ctgatttgct  ggttgaggatt ttgtgatgc caattgacct cttagacaata atgtttgagg ctatgtggcc  cctcccaact gtctatgtc ctgctgtggtt atttcttgac gtctctttt caaccgcatc  catcatgcat ctctgtgcca ttctagtgga tctgtacata gccatcaaaa agccaatcca  ggccaatcaa tataactcac gggctacagc attcatcaag attacagtgg tgtggttaat  ttcaataggc attgccattc cagtcctcat taaagggata gagactgatg tggacaaccc  aaacaatatc acttgtgtgc tgacaaaagga acgttttggc gatttcacgc tctttggctc  tgcgttgcc tctctcacac ctcttgcaat tatgattgtc acctactttc tcaactatcca  gactgtgtct acagttttcc aaagggatga aacaccttgc tctgcacggg aaaggttggc  aatgctggat ggttctcgaa aggacaaggc tctgcccacg tcaggtgatg aaacacttat  gcgaagaaca tccacaattg ggaaaaagtc agtgcagacc atttccaacg aacagagagc  ctcaaaagtc ctagggattg tgttttctct ctttttgctt atgtgggtgc ccttctttat  tacaaatata actttagttt tatgtgattc ctgtaaccaa actactctcc aaatgctcct  ggagatatatt gtgtggatag gctatgttcc ctccaggagt aatcctttgg tctacacct  cttcaataag acatttcggg atgcatttgg ccgatatatc acctgcaatt accggggccac  aaagtcatga aaaaacttca gaaaacgctc cagtaagatc tacttccgga atccaatggc  agagaaactct aagtttttca agaaacatgg aattcgaaat ggatttaacc ctgccatgta  ccagagtcca atgaggctcc gaagttcaac cattcagctc tcaatcaatca ttctactaga  tacgctcttc ctcaactgaa atgaagtgga caaaactgga gagcaagta gttatgtata  gcagaaactgg cagttgtcat caaacataat gatgagtgaag atgatgaatg agatgtaaat  gtgccagaaa tatattatat aaagaatttt atgtcatata tcaaatcatc tctttaacct  aagatgtaag tattaagaat atctaatttt cctaatttgg acaagattat tccatgagga  aaataatttt atatagctac aaatgaaaaa aatccagcac ctggttataa ttttaagga  ttcgaatgaa ataaagtcaa atcaataaat ttcaggtctt aaaaaaaa</p>	Homo sapiens
14	133	5-HT2B Receptor	NP_000858.1	<p>MALSYRVSEL QSTIPEHILO STFVHVISSN WSGLOTESIP EEMKQIVEEQ GNKLHWAALL P  ILMVIPTIG GNTLVILAVS LEKKLQYATN YFLMSLAVAD LLVGLFVMPI ALLTIMFEAM  WPLPLVLCFA WLFLDLVLFST ASIMHLCAIS VDRIYAIKKP IQANQYNSRA TAFIKITVWV  LISIGIAIPV PIKGIETDND NNNITCVLT KERFGDFMLF GSLAAFFTPL AIMIVTYFLT  IHALQKKAYL VKNKPPQRLT WLTSTVTFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens

15	134	5-HT2C Receptor	nm_000868	V	LMRRSTIGK KSVQTSISNEQ RASKVLGIVF FLFLMWCFF FITNITVLVC DSCNQTTLOM LLEIFVWIGY VSSGVNPLVY TLFNKTFRDA FGRIYTCNRYR ATKSVKTLRK RSSKIYFRNP MAENSKFPKK HGIRNGINPA MYQSPMRLRS STIQSSSIIL LDTLLLTENE GDKTEEQVSY	Homo sapiens
					accgcgcgga ggtaggcgct ctgggtgcttg cggaggaagc ttccttctc agatgcaccg A atcttccga tactgccttt ggagcgcta gattgctagc ctgtgctgct ccattggcct gccttgccc ttacctgccc attgcatatg aactcttctt ctgtctgtac atcgttgtcg tcggagtcgt cgcgctgctc gtggcgctcg tgtgatggcc ttctgccgt tagagttagt tagttagtta ggggccaacg aagaagaaag aagacgcgat tagtgcaag atgctggagg tggtcagtta ctaagctaga gtaagatagc ggagcgaata gagccaaacc tagccggggg gcgcacggtc acccaaggga ggtcgactcg ccggcgcttc ctatcgccc gagctccctc cattcctctc cctccgcga ggcgcgaggt tgcggcgcc agcgagcgc agctcagcgc accgactgcc gcgggctccg ctgggcgatt gcagcgagtc ccgtttctc tctagctgcc gcccgcgga ccgctgctg gtcttctctc cggacgtag tgggttatca gctaacaccc gcgagcatct ataacatagg ccaactgacg ccatccttca aaaaacta aaggatgata tgatgaacct agcctgttaa ttctgtctc tcaatttaa actttggtt cttaaagactg aagcaatcat ggtgaacctg aggaatgcgg tgcattcatt ccttgtgac ctaattggcc tattggtttg gcaatgtgat atttctgtga gccagtagc agctatagta actgacattt tcaatacctc cgatggtgga cgcttcaat tcccagcgg ggtacaaaac tggccagcac tttcaatcgt catcataata atcatgacaa taggtggcaa catcctgtg atcatggcag taagcatgga aagaaaactg cacaatgcc ccaattactt cttaatgtcc ctgcccattg ctgatatgct agtgggacta cttgtcatgc cctgtctct cctggcaatc ctttatgatt atgtctggcc actacataga tatttgctg ccgtctggat tcttttagat gttttatttt caacagctc catcatgcac ctctgcgcta tctgtgtga tgggtatgta gcaataccta atcctattga gcatagcgt ttcaattgc ggaactaagg catcatgaag attgctattg tttgggcaat ttctataggt gtatcagttc ctatccctgt gattggactg agggacgaag aaaaggtgtt cgtgaacaac acgacgtgcg tgcacaacga cccaaatttc gttcttattg ggtccttcgt agctttcttc ataccgctga cgattatggt gattacgtat tgcctgacca tctacgttct gcgcgacaa gctttgatgt tactgacggt ccacaccgag gaaccgctg gactaagctt gatttctctg aagtgtgca agaggaatac gcccaggaag gagaactctg caaacctaa ccaagaccag aacgcacgcc gaagaaagaa gaggagaga cgtcctaggg gcacatgca ggctatcaac aatgaagaa agcttctgaa agtcttggg attgttttct ttgtgttct gatcatgtgg tgcctattt tcatcaccaa tattctgtct gttctttgtg agaagtcctg taaccaaaag ctcatggaaa agcttctgaa tgtgtttgtt tggattggct atgtttgttc aggaatcaat cctctggtg atactctgt caacaaaatt taccgaaggg cattctccaa ctatttgcgt tgcaattata aggtagagaa aaagcctcct gtcaggcaga ttccaaagat tgcggccact gctttgtctg ggtgagagat taatgttaac atttatcggc ataccaatga accggtgatc gagaaagcca gtgacaaatga gccgggtata gagatgcaag ttgagaattt agagttacca gtaaatccct ccagttgtgt tagcgaaagg attagcagtg tgtgagaaag aacagcacag tcttttctca cgggtacagc tacatatgta ggaataattt cttctttaat ttttctgttg gtcttaacta atgtaaatat tgctgtctga aaaagtgtt	

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16	134	5-HT2C Receptor	NP_000859.1	ctaatctcctg tatgttatcc actacaggtt ttatgagact tcctattaat ttattaaatt tattaaatg tgaataaaaa aaaaaaaa aaaa VNIILNAVHS FLVHLIGLLV WQDISVSPV AAIVTDIFNT SDGGRFKFPD GVQWNPALSI P VIIIIMTIGG NILVIMAVSM EKCLHNATNY FLMSLAIDM LVGLLVMPLS LLAILDYVW PLPRYLCPVW ISLDVLFSTA SIMHLCAISL DRVAIRNPI EHSRENSRTK AIMKIAIWA ISIGSVPIP VIGLRDEKV FVNNTTCVLN DPNFVLIGSF VAFFIPLTIM VITYCLTIYV LRRQALMLH GHTEPPGLS LDFLKCKRN TAEENSANP NQDNARRRK KKERRPRGTM QAINNERKAS KVLGIVFFVF LIMWCPFFIT NILSVLCEKS CNQKIMEKLL NVFWWIGYVC SGINPLVYTL FNKIYRRAFS NYLRNRYKVE KKPPVRQIPR VAATALS GRE LNVNIYRHTN EPVIEKASDN EPGIEMQVEN LELPVNPSSV VSERISSV	Homo sapiens
17	136	5-HT4 Receptor	NM_000870	cgggtccttat ttctgtaat ggacaaactt gatgctaag tgagttctga ggaggttttc A gggtcagtg agaaggtggt gctgtcaag ttctctoga cggttatcct gatggccatc ttggggaacc tgctggtgat ggtggtctg tgctgggaca ggcagctcag gaaataaaaa acaaattatt tcattgtatc tctgtcttt gcggtatcgc tggtttcgggt gctgggatg ccctttgggt ccattgagct ggttcaagac atctggattt atggggaggt gttttgtctt gttcggacat ctctggacgt cctgtcacca acggcatoga ttttcacct gtctgcatt tctctggata ggtattacgc catctgtgc cagcctttgg tctataggaa caagatgacc cctctgcga tcgcattaat gctgggagc tgctgggtca tccccacgtt tattctttt ctccctataa tgcaaggctg gaataacatt ggcataaattg attgataga aaagaggaag ttcaaccaga acttaactc tacgtactgt gcttctctga tcaacaagcc ctacgccatc acctgcttg tgggtgacct ctacatccca ttctctctca tgggtctggc ctattaccgc atctatgtca cagctaagga gcatgcccc catagccaga gtttacaac ggcagagacc tcctccgaga gcaggcctca gtcggcagac cagcatagca ctcatcgcat gaggacagag accaaaagcag ccaagacct gtgcatactc atgggttgct tctgctctg ctgggaccca ttctttgtca ccaatattgt ggtatccttc atagactaca ctgtccctgg caggtgtgg actgctttcc tctggctcgg ctatatcaat tccgggttga accttttct ctacgcctc tgataaagt cttttagacg tgccttctc atcatcctct gctgtgatga tgagcgctac cgaagacct ccattctggg ccagactgtc cctgtttcaa ccacaacct taatggatcc acacatgtac taaggagatg agtgagtggt ggtggccagt gggagagtca gtgtcacccg ccagcaactt ctcttttgg gctgtctcag cccagtgaca cttaggcccc tgggacaatg acccagaaga cagccatgcc tccgaaagag gccaggtgcc taagctgctg ctgtgctg actgcaccg gcattctctt caactgagc tttccgtccg caagtgcag aaccgggtg tcgctggg	Homo sapiens
18	136	5-HT4 Receptor	NP_000861.1	MDKLDANVSS EEGFGSVEKV VLTFLSTVI LMAILGNLIV MVAVCWDRQL RKIKTNYFIV P SLAFADLLVS VLMPFGAIE LVQDIWIYGE VFCLVRTSLD VLLTASIFH LCCISLDTRY AICCCQLVYR NKMTPLRIAL MLGGCWVIPT FISFLPMQG WNNIGIIDLI EKRFENQNSN STYCVFMVVK PYAITCSVA FYIPFLMLV AYRIYVTAQ EHAHQIOMIQ RAGASSESRP QSADQSHSTR MRTEKAAKT LCLIMGCFCL CWAPFFVTNI VDPFIDYTP GQVWTAFLWL GYINSGLNPF LYAFLNKSFR RAFLIILCCD DERYRRPSIL GQTVPCSTTT INGSTHVLRD AVECGGWES QCHPPATSPL VAAQPSDT	Homo sapiens
19	138	5-HT6	NM_000871	cccgagagcg cccattcacc cccctcacc acctccccg gttcccaact ccccgcaactc A ccccgagagcg	Homo



21	139	5-HT7 Receptor	NM_000872	ccatgggacg cggcacacgg cggcgcgatg atggagctta acagcagcgg ccgcccggac A ctctacgggc acctccgctc ttctctcttg ccagaagtgg ggcgcgggct gcccagcttg agccccgaag gtggcgccga cccggtcgcg ggtccctggg cgcgcacact gctgagcgag gtgacagcca gcccgcgcc cactgggac ggcggcgccg acaatgcctc cggctgtggg gaacagatca actacggcag agtcgagaaa gtgtgatct cgtccatcct gacgtcctc acgctgctga cgatcgcggg caactgcctg gtgtgatct cgtgtgctt cgtcaagaag ctccgccagc cctccaacta cctgatctg tccctggcg tggccgacct ctcggtggct gtggcggtca tgccttcgt cagcgtacc gacctatcg ggggcaagt gatctttgga cactttttct gtaatgtctt catcgccatg gacgtcatgt gctgcacggc ctgcatcatg acctgtgctg tgatcagcat tgacaggtac cttgggatca caaggccctt cacatacctt gtgaggcaga atgggaaatg catggcgaag atgattctt cgtctggct tctctccgct tccatcact tacctccact cttgggatg gctcagaatg taaatgatga taagtgctg ttgatcagcc aggaactttg ctatacgatt tactctaccg cagtggcatt ttatatcccc atgtccgtca tgcctttcat gtactaccag atttacaagg ctgccaggaa gagtgtgctc aaacacaaat ttctgggctt cctcgagtg gagccagaca cgtcatcgc cctgaatggc atagtgaagc tccagaagga ggtggaagag tgtgaaacc ttctgagact cctcaagcat gaaaggaaaa acatctccat ctttaagcga gaacagaaa cagccaccac cctggggatc atcgtcgggg cctttaccgt gtgctggctg ccatttttc tctctcgac agccagaccc ttcatctgtg gcaactcctg cagctgcac cactgtggg tggagaggac atttctgtg ctaggctatg caaactctct cattaacctt ttatatatg cctcttcaa cgggacctg aggaccact atcgagcct gctccagtc cagtacgga atatacacc gaagctctca gctgcaggca tgcataagc cctgaagctt gctgagaggc cagagagacc tgagttgtg ctacaaaatg ctgactact tagaaaaa ggtcatgatt catgattga agcagaacaa tgag	Homo sapiens
22	139	5-HT7 Receptor	NP_000863.1	MDVNSSGRP DLYGHLRSL LPEVGRGLPD LSPDGGADPV AGSWAPHLLS EVTASPAW P DAPPDNASGC GEQINYGRVE KVVIGSILTL ITLLTIAGNC LVVISVCFVK KLRQPSNYLI VSLALADLSV AVAVMPFVSU TDLIGGKWF GHFFCNVPIA MDVMCCTASI MTLCVISIDR YLGITRPLTY PVRQNGKMA KMLSVWLLS ASITLPLFG WAQNVNDDKV CLISQDFGYT IYSTAVAFYI PMSVLMFYI QIYKAARKSA AKHKFPFPR VEPDSVIALN GIVKLQKEVE ECANLSRLK HERKNISIFK REQKAATTLG IIVGAFTVCW LPFFLLSTAR PFICGTSCSC IPLWVERTFL WLGYANSLN PFYIAFFNRD LRTTYRSLQ CQYRNINRKL SAAGMHEALK LAERPERPEF VLQADYCRK KGHDS atgagtgtca gaagtgtga ggtgctctg tctgaatccc agagcctct ctcctctgt A gaggtggca ggtgaggaag ggttaacct cactggaag aatccctgga gctagcggct gctgaaggcg tcgaggtgtg ggggacttg gacagacag tcaggcagcc gggagctctg ccagctttg tgacctggg cgggctggg agcgtgctg cgggagccgg aggactatga gctgccgcg gttgtccaga gccagccca gccctacgag cgcggccgg agctctgtt cctggaactt tgggcaactg cctctggacc cctgcccggc agcagcgag atggtgctt cctggtccc cttggtgccc gtctgtgat gtgccagcc tgtgccgccc atgccgccc ccatctcagc ttccagcc gctacatcg gctcaggtg gctcagcc ctggtctctg tgccccggaa cgtgctggtg atctgggccc tgaagggtga ccaggcgctg cgggatgcca	Homo sapiens
23	272	Adenosine A1 Receptor	NM_000674	atgagtgtca gaagtgtga ggtgctctg tctgaatccc agagcctct ctcctctgt A gaggtggca ggtgaggaag ggttaacct cactggaag aatccctgga gctagcggct gctgaaggcg tcgaggtgtg ggggacttg gacagacag tcaggcagcc gggagctctg ccagctttg tgacctggg cgggctggg agcgtgctg cgggagccgg aggactatga gctgccgcg gttgtccaga gccagccca gccctacgag cgcggccgg agctctgtt cctggaactt tgggcaactg cctctggacc cctgcccggc agcagcgag atggtgctt cctggtccc cttggtgccc gtctgtgat gtgccagcc tgtgccgccc atgccgccc ccatctcagc ttccagcc gctacatcg gctcaggtg gctcagcc ctggtctctg tgccccggaa cgtgctggtg atctgggccc tgaagggtga ccaggcgctg cgggatgcca	Homo sapiens

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ggctgggag aagtgcttg gcttctctg gctgagcagg ggaagtctgt tgtcttagat  
gttggtggtg cagccccagg accaagctta agagagagag agcatctgt ctgagacgga  
tggaaggaga gaggttagg atgcactggc ctgttctgta ggagagactg gccagaggca  
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gagaggcaga aagggtaggt tcagtaatca tttctgatga ttgtctggag tgtggctcc  
acgcccctgg gagtgagctt ggtgcggtag gtgctggcct caaacagcca cgaggtggtg  
gctctgagcc ctcttcttg cctgagctt tccggggagg agcctggagt gtaattacct  
gtcatctggg ccaccagct cactggcccc cgttgcgggg cctggactgt cctagggtgac  
cccatctctg ctgcttcttg gctgatgga gaggagaaca ctagacatgc caactcggga  
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tgagagcatg tgggggaagg ccttgctgtc atgtaatcc ctcaataccc ctagtatctg  
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ggatctggga tctggggaag gaccaccca tgccttgcca agcctggagc cctgtgttg  
gggggcaagg tgggggagcc tggagcccc ctgtgggagg gcgagggggg ggaagcctgga  
gccccgtgtt gggagggcga ggcgggggat cgtgtcggcc ctgtgtcggg gggcgaggga  
ggggaggttg ccgtcgggtt acctctgaa catgaggttc aactccagg cttgcttcca  
agcccttccc tctgttgga attgggtgtg cctgggtccc caaggaggcc ccatgtgact  
aataaaaaac tgtgaacct

Homo

P

MPPSISAFQA AYIGIEVLIA LVSVPGNVLV IWAVKNQAL RDATECFIVS LAVADVAVGA

Adenosine A1 NP\_000665.1

272

24



[illegible]

26	273	Adenosine A2a Receptor	NP_000666.2	aa aa aa	<p>           agtgacaaaag ctggggatcaa ggataggggag ttgtaacaga gcagtgccag agcatggggcc            caggtccccag gggagaggtt ggggctggca ggcactggc atgtgctgag tagcgagag            ctaccagtg agaggccttg tctaactgcc ttctctcta aagggaaatgt tttttctga            gataaaaataa aaacgagcca catcgtgttt taagcttgtc caaatgaaa aaaaaaaaaa            aa            PFAITISTGF TVELAIIVLA ILGNVLVCWA VMLNSLNQNV TNYFVVSLLA ADIAVGVLA I P            AKGIIAICWV LSFAIGLTPM LGWNCGQPK EGNHSGQCG EGQVACLFD VPMNVMVYF            NFFACVLVPL LLMGLVYLRI FLARRQLKQ MESQPLPGER ARSTLQKEVH AAKSLAIIVG            LFALCWLP LH IINCFTFFCP DCSHAPLWLM YLAIVLSHTN SVNPFYIY RIREFRQTFR            KIIRSHVLRQ QEPFKAAGTS ARVLAHGS D GEQVSLRLNG HPPGVWANGS APHPERRPNG            YALGLVSGGS AQESQNTGL PDVELLSHEL KGVCPPEPGL DDPLAQDGAG VS            gggcaatttg ttagttatcc gcgcgaccca agacgcgcca cggcgccctgg accggagggg A            ccccgcgcg ggcggaactt tgggctcggg cagatgggtg gtgctccgcc cagcccgaga            cggcgggcg cgcggggcca tgggtggcg cttctggcg cggggggggc cgaccggtgg            gtcccgcca ccagcgccc cgggtctcac gcggtggcg ctaggagcg gcgcggtccg            ggcgtatgg ccatgcccc cgtggcccc ccatgctgct ggagacacag gacgcgctgt            tagggggcg cggggggcca atcgcgcg cttcggtggc gggcaacgtg ctggtgtgcg            acgtggcgct ggagctggc atcgcgcg cgtccacca ctactccctg gtgctccctgg            ccgcggtgg cagcggaac actctgcaga gccccacca tctctccctg gtgctccctgg            ctgcgggcca cgtggcggtg gggctcttcg cctccctt tgccatcacc atcagcctgg            gcttctgcac tgacttctac ggcgtcctct tctcgctcg cttcgctgct gtgctcacgc            agagctccat cttcagcctt ctggcgctgg cagtcgacag atacctggc atctgtgtcc            cgctcagga taaaagtgtg gtcacgggga cccgagcaag aggggtcatt gctgtcctct            gggctcttg ctttggcatc gattgactc cttctctgg gtagaacagt aaagacagtg            ccaccaacaa ctgcacagaa ccttgggatg gaaccacgaa tgaaagctgc tgccttgtga            agtgtctct tgagaaatgtg gtcccatga gctacatggt atattcaat ttctttgggt            gtgttctgcc cccactgctt ataagtctgg tgatctacat taagatcttc ctggtggcct            gcaggcagct tcagcgact gagctgatgg accactcgag gaccacctc cagcgggaga            tccatgcagc caagtcactg gccatgatgg tggggatttt tggcctgtgc tggttacctg            tgcagtctgt taactgtgc actcttttcc agccagctca gggtaaaaaat aagcccaagt            gggcaatgaa tatggccatt cttctgtcac atgccaattc agttgtcaat cccattgtct            atgcttacog gaaccgagac ttcgctaca cttttacaa aattatctcc aggtatcttc            tctgccaagc agatgtcaag agtgggaatg gtcaggctgg ggtacagcct gctctcggtg            tgggctatg atctaggctc tgcctcttc caggagagaaga tacaatatcca caagaaacaa            agaggacacg gctgggtttc atgtgaaag atagctacac ctcaacagga aatgactgc            ctctcttgag cacttccctg gagctaccac gtatctagct aatatgtatg tgtcagtagt            aggtcccaag gattgacaaa tataattatg atctattcag ctgcttttac tgtgtggatt            atgccaacag cttgaatgga ttctaacaga cttttttgt tttaaaagtc tgcctgtttt            atggtggaaa attactgaaa ctattttact gtgaaacagt gtgaactatt ataagtcaaa            tactttttaa cttagaggca atggaaaaat aaaagttgac tgtactaaaa atg         </p>	Homo sapiens
27	274	Adenosine A2b Receptor	NM_000676		<p>           cggcgcgcg ggcggaactt tgggctcggg cagatgggtg gtgctccgcc cagcccgaga            cggcgggcg cgcggggcca tgggtggcg cttctggcg cggggggggc cgaccggtgg            gtcccgcca ccagcgccc cgggtctcac gcggtggcg ctaggagcg gcgcggtccg            ggcgtatgg ccatgcccc cgtggcccc ccatgctgct ggagacacag gacgcgctgt            tagggggcg cggggggcca atcgcgcg cttcggtggc gggcaacgtg ctggtgtgcg            acgtggcgct ggagctggc atcgcgcg cgtccacca ctactccctg gtgctccctgg            ccgcggtgg cagcggaac actctgcaga gccccacca tctctccctg gtgctccctgg            ctgcgggcca cgtggcggtg gggctcttcg cctccctt tgccatcacc atcagcctgg            gcttctgcac tgacttctac ggcgtcctct tctcgctcg cttcgctgct gtgctcacgc            agagctccat cttcagcctt ctggcgctgg cagtcgacag atacctggc atctgtgtcc            cgctcagga taaaagtgtg gtcacgggga cccgagcaag aggggtcatt gctgtcctct            gggctcttg ctttggcatc gattgactc cttctctgg gtagaacagt aaagacagtg            ccaccaacaa ctgcacagaa ccttgggatg gaaccacgaa tgaaagctgc tgccttgtga            agtgtctct tgagaaatgtg gtcccatga gctacatggt atattcaat ttctttgggt            gtgttctgcc cccactgctt ataagtctgg tgatctacat taagatcttc ctggtggcct            gcaggcagct tcagcgact gagctgatgg accactcgag gaccacctc cagcgggaga            tccatgcagc caagtcactg gccatgatgg tggggatttt tggcctgtgc tggttacctg            tgcagtctgt taactgtgc actcttttcc agccagctca gggtaaaaaat aagcccaagt            gggcaatgaa tatggccatt cttctgtcac atgccaattc agttgtcaat cccattgtct            atgcttacog gaaccgagac ttcgctaca cttttacaa aattatctcc aggtatcttc            tctgccaagc agatgtcaag agtgggaatg gtcaggctgg ggtacagcct gctctcggtg            tgggctatg atctaggctc tgcctcttc caggagagaaga tacaatatcca caagaaacaa            agaggacacg gctgggtttc atgtgaaag atagctacac ctcaacagga aatgactgc            ctctcttgag cacttccctg gagctaccac gtatctagct aatatgtatg tgtcagtagt            aggtcccaag gattgacaaa tataattatg atctattcag ctgcttttac tgtgtggatt            atgccaacag cttgaatgga ttctaacaga cttttttgt tttaaaagtc tgcctgtttt            atggtggaaa attactgaaa ctattttact gtgaaacagt gtgaactatt ataagtcaaa            tactttttaa cttagaggca atggaaaaat aaaagttgac tgtactaaaa atg         </p>	Homo sapiens

28	274	Adenosine A2b Receptor	NP_000667.1	MLLETQDALY VALELVIAAL SVAGNVLVCA AVGTANTLQT PTNYFLVSLA AADVAVGLFA P IPFAITISLG FCTDFYGCLE LACFVLVLTQ SSIFSLAVA VDRYLAICVP LRYKSILVTGT RARGVIAVLW VLAFIGLTP FLGWSKDSA TNNCTEPWDG TTNESCCLVK CLFENVVPMMS YMYVNFPGC VLPPLLLIMLV IYIKIFLVAC RQLQRTLEMD HSRITLQREI HAAKSLAMIV GIFALCWLPV HAVNCVTLFQ PAQGNKPKW AMNMAILLSH ANSVNPIVY AYNRDFFRYT FKIISRYLL CQADVKSNG QAGVQPALGV GL	Homo sapiens
29	275	Adenosine A3 Receptor	NM_000677	atctttgtctg caaaggctgg gtatggctgg tgctcagcaa agcgtcaact cgtgcaagaa A cttagcagga atagttctgg ctaaggttag gaggtgcca ccaaaagtctc tttttgttc ctctgcttct cccgtttgcc tctttatcat gagatctttt tgctaagctg gcagaaagat tgcatagtca gtgcttccag ctctgtccc accgtatcct gcactgtcct ctggtccctg aatgaatgaa ctctgatacc caatcttggc tcgagccttc tctatgccac tcatggctcc tcttctgtc tttccatctt tttgctgaga gttctgagct ctgtacttcc tcttggtcca tctcacttcc tgaacacccc ctgaagaggg ttgcttatct tgatggaact caaaaagcca aaaagctgca ggcagagggc ttgaggacat ctgtttgggg aactaagagc agcagcactt tcagattcag tccatataga gctgtcctac agcattctgg aaacttgagg atgtgctgtg cataaagggg ctggaagtga cccactgtg atgagccctt tctaaggaga aggttttcca agagatcacc ccaccagaaa aggttaggaa tgagcaagt gggaatttta gactgtcaact gcacatggac ctctgggaag acgtctggcg agagctagg ccactggccc tacagacgga tcttgctggc tcacctgtcc ctgtggaggt tccccggga aggcaagatg ccaacaaca gcactgctct gtcatggcc aatgttacct acatcacct ggaaattttc attggactct gcgcatagt gggcaacgtg ctgttcatct cgttggctcaa gctgaacccc agcctgcaga ccaccacct ctatttctatt gtctctctag ccttgcctga cattgctgtt ggggtgctgg tcattgcttt ggccattgtt gtcagcctgg gcatacaaat ccacttctac agctgcttt ttatgacttg cctactgctt atctttacc cgcctccat catgtccttg ctggccatcg ctgtggaccg atacttgcg gtaagctta ccgtcagata caagagggtc accactcaca gaagaatatg gctggccctg ggcctttgct ggtggtgtc attcctgggt ggattgacct ccatgttttg ctggaacatg aaactgacct cagagtacca cagaaatgtc accttcttt catgccaatt tgtttccgtc atgagaatgg actacatggt atacttcagc ttcctcacct ggattttcat cccctgggtt gtcatgtgcg ccatctatct tgacatcttt tacatcattc ggaacaaact cagtctgaac ttatctaaact ccaaagagac aggtgcattt tatggacggg agttcaagac ggctaagtc ttgtttctgg ttcttttctt gtttgcctg tcatggctgc ctttatctat catcaactgc atcatctact ttaattggtga ggtaccacag ctgtgctgtg acatggggcat cctgctgtcc catgccaact ccatgatgaa cccatctctc tatgcttata aaataaagaa gttcaaggaa acctaccttt tgatcctcaa agcctgtgtg gcttgccatc cctctgattc ttggacaca agcattgaga agaattctga gtagtattcc atcagagatg actctgtctc attgaccttc agattccccca tcaacaaaca cttagaggcc tgtatgcctg ggccaaagga tttttacatc ctgtattact tccactactc tgggagcatc tccagtgtc cccaattata tctccccac tccactactc tcttctcca cttcattttt cctttgtcct ttctctctaa ttcagtgttt tggaggcctg acttggggac aacgtattat tgatatatt gtctgttttc ctcttccca atagaagaat aagtcattgga gcctgaagg tgcctagtgtg acttactgac aaaaggctct agttgggctg aacatgtgtg tgggtgtgac tcatctccat	Homo sapiens

Homo  
sapiens30 275 Adenosine A3 NP\_000668.1  
Receptor

gccattgtgg aattgagcag agaactgtgt ctcggaggat gcctagaaga tgttggaac  
 agaagaaata aactgagttt aaggggact taaactgctg aattcacctg tggatgtttt  
 tgagtaataa aagctaata g

MPNNSTALS ANVSLITIMEI FGLCAIVGN VLVICVVKLN PSLQTTTFYF IVSLALADIA P  
 VGLVIMPLAI VVSLGITHF YSCLEMTCLL LIFTHASIMS LLAIAVDRL RVKLTVRKYR  
 VTTHRIWLA LGLCWLVSL VGLTPMFGWN MKLTSEYHRN VTFLSCQFVS VMMDYMYF  
 SFLTWIFIP VVMCAIYLDI FYIIRNKLS NLSNSETGA FYGREFTAK SLFLVLFFA  
 LSWPLSIIN CIIFYNGEVP QLVLYMGILL SHANSMMNPI VYAYKIKKFK EYLLILKAC  
 VVCHPSDSLD TSIEKNSE

31 309 Melanocortin NM\_000529  
 2 Receptor  
 (adrenocorti  
 cotropic  
 hormone)  
 (MC2R)

Homo  
sapiens

atgaagcaca ttatcaactc gtatgaaac atcaacaaca cagcaagaaa taattccgac A  
 tgcctcctgt tggttttgcc ggaggagata tttttcaca tttccattgt tggagttttg  
 gagaatctga tgcctcctgt ggcgtgttcc aagaataaga atctccaggc acccatgtac  
 tttttcatct gtagcttggc catatctgat atgtcgggca gcctatataa gatcttgaa  
 aatatcctga tcatattgag aaacatgggc tatctcaagc cagctggcag ttttgaacc  
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 ctgttccgcg tgatgctggt cttcatcctg tgcctctatg tgcacatgtt cctgctggct  
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 ctgaccatcc tgcctcgggt cttcatcttc tgcctggccc cctttgtgct tcatgtctc  
 ttgatgacat tctgcccag taacccctac tgcgcctgct acatgtctct cttccaggtg  
 aacggcatgt tgatcatgtg caatgcctc attgacctc tcatatatgc cttccggagc  
 ccagagctca gggacgcatt caaaaagatg atcttctga gcaggtactg gtag  
 INNTARNNSD CERVLPPEI FFTISIVGL ENLIVLLAVF KNKNLQAPMY P

32 309 Melanocortin NP\_000520.1  
 2 Receptor  
 (adrenocorti  
 cotropic  
 hormone)  
 (MC2R)

Homo  
sapiens

FFICSLAISD MGLSKYLE NILLIRNMG YLKPRGSFET TADDIIDSIF VLSLLGSIFS  
 LSVIAADRYI TIFHALRYHS IVTMRRTVAV LTIVITFCTG TGITMVFISH HVPFVITFTS  
 LFPLMLVFIL CLYVHMFLA RSHTRKISTL PRANMKGAIT LTILLGVFIF CWAPFVILHVL  
 LMTFCPSNPY CACYMSLFQV NGMLIMCNAV IDPFIYAFRS PELRDAFKKM IFCSRYW

33 376 Alpha 1d- nm\_000678  
 adrenoreceptor

Homo  
sapiens

tcctgcggcg cgctcgttct gtgcccccg cccggcccacc gacggcccg cgttgagatg A  
 actttccgcg atctcctgag cgtcagtttc gagggacccc gcccgacag cagcgacggg  
 ggctccagcg cggcgcgcg cgggggcagc gcgggcgcg cggccccctc ggagggccccg  
 gcgtggggcg gcgtgcccgg ggcgcggggc ggcgcggcg gcgtggtggc gcagggcagc  
 ggccagagaca accggagctc cgcgggggag cccggggagc cggcgccggg cggcgacgtg  
 aatggcacgg cggccgtcgg gggactggtg gtgagcgcg agggcggtgg cgtgggcgtc  
 ttcttgagcag ccttcactc tatggccgtg gcaggtaac tgcctgtcat cctctcagtg  
 gcctgcaacc gccacctgca gaccgtcac aactatttca tctggaacct ggcgtggcc  
 gacctgctgc tgagcgccac cgtactgcc ttctcgcca ccatggaggt tctgggcttc  
 tgggctttg gccgcgctt ctgcgacgta tggggcccg tggacgtgct gtgctgcacg  
 gcctccatcc tcagcctctg caccatctcc gtggaccggt acgtggcggt gcgccactca

34	Alpha 1d- adrenoceptor	NP_000669.1	376	ctcaagtacc cagccatcat gaccgagcgc aaggcggcgc ccatcctggc cctgctctgg gtcgtagccc tgggtggtgc cgtaggcccc ctgctgggct ggaaggagcc cgtgccccct gacgagcgct tctgcggtat caccgaggag gcgggctacg ctgtcttctc ctccgtgtgc tccttctacc tgcctatggc ggcatcgtg gtcatgtact gccgcgtgta cgtggctcgcg cgacgacca cgcgcagcct cgagcaggc gtcaagcgcg agcagggcaa ggcctccgag gtggctgcgc gcatccactg tcgcggcgcg gccacgggcg ccgacggggc gcacggcatg cgacgacca agggccacac ctccgcagc tcgtctcgc tgcgcctgct caagtctcc cgtgagaaga aagcggccaa gactctggcc atcgtcgtg gtgtcttctg tctctgctgg ttccctttct tctttgtcct gccgtcggc tcttgttcc cgcagctgaa gccatcggag ggcgtcttca aggtcatctt ctggtcggc tacttcaaca gctgctgtaa ccgctcatc taccctgtt ccagccgcga gttcaagcgc gccttctcc gtctcctgc ctgccagtgc cgtcgtgcc ggcgcgcgcg cctctctgg cgtgtctac gccaccactg gcgggcctcc accagggcc tgcgccagga ctgcgcccc agtcggccc acgcgcccc cggagcgccg ctggccctca ccgcgctccc cgaccccgac ccgaagccc caggcacgcc cgagtgcag gtcccggtcg ccagccgtcg aaagccacc agcgccttc gcgagtggag cctgctggg ccgttccgga gacccacgac ccagctgcgc gccaaagtct ccagcctgtc gcacaagatc cgcccgggg gcgcgcagcg cgcagaggca gcgtgcgcc agcgtcaga ggtggaggct gtgtccctag gcgtccca cgaacctacg ggaagccgat atttaaggac ccagagcta ggcgcggag gccgactaca gcaacctacg ttgggggtaa gggggaccag agagcgggc tgggtgtcta agagccccg tgctctgggc agacccggaa actgatacag gcagctgctc tgtgacatcc ctgaggaaat gggcagagct tgaggtgga gcccttgaaa ggtgaaaaat agtggggccc cctgctggac tcaggtgccc agaactctt tcttagaagg gagaggtcgc ggcctccgtg gggccttttg ctcccaatcc ctatttgaga aacactgccc catctctccat gccctgaacc ctgagtagac agccccaagc atggccagga aggcctgccc MTRDRLSVS FEGRPDSSA GSSSAGGGGG SAGGAAPSEG PAVGGVPGA GGGGVVVGAG P SGEDNRSSAG EPGSAGAGGD VNGTAAVGGI VVSAQGVGVG VFLAAFILMA VAGNLLVILS VACNRHLQTV TNYFIVNLAV ADLLSATVL PFSATMEVLG FWAFFRAFCV VMAAVDVLCC TASILSLCTI SVDRYVGVVRH SLKYPAMTE RKAAAILALL WVVALVSVG PLLGWKEPVP PDERFCGITE EAGYAVFSSV CSFYLPMAVI VMYCRVYV ARSTTRSLEA GVKRERKAS EVVLRHCRG AATGADGAHG MRSAGHTFR SLSVRLKF SREKKAATL AIVGVFVLC WFFFFVLP GLFPQLKPS EGVFKVIFWL GFYNSCVNPL IYPCSSREFK RAFRLRLRCQ CRRRRRRPL WRVYGHWRRA STSGLRQDCA PSSGDAPPGA PLALTALPD DPEPPGTPEM QAPVASRRKP PSAREWRLL GPFRRPTQL RAKVSSLSHK IRAGGAQRAE AACAAQRSEVE AVSLGVPHEV AEGATCQAYE LADYSNLRET DI 35 Alpha 1b- adrenoceptor	NM_000679	377	agccagggaga cgtgctcgc gctgggctgc ccgggggaga tgactcctgc caggaggcg A cctctgggaa gaagaccac gcgggaagcaa agtttcaggg cagctgagga gccttcgccc cagcccttcc gagcccaatc atccccagc ctatgaggg cggactctaa gatgaatccc gacctggaca ccggccaca caccatcagc cctgcccact ggggagaggt gaaaaatgcc aacttcaact gcccacaaca gacctcagc aactccacac tgcctcagct ggacatcacc agggccatct ctgtgggcct ggtgctgggc gccttctcc tcttggccat cgtgggcaac	Homo sapiens
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36	Alpha 1b- adrenoceptor	NP_000670.1	<p>atcctagtca tcttgtctgt ggctgtgaac cggcaacctgc ggacgcccc caactacttc  attgtcaacc tggccatggc cgacctgctg ttgagcttea ccgtccctgc cttctcagcg  gccctagagg tgcctggcta ctgggtgctg gggcgatct tctgtgacat ctgggcagcc  gtgatgtcc tgtgtgtcac agcgtccatt ctgagcctgt gcgccatctc catcgatcgc  tacatgggg tgcgtactc tctgcagtat cccacgctgt tcacccggag gaaggccatc  ttggcgctgc tcaagtgtctg ggtctgttcc accgctatct ccacggggc tctcttggg  tggaaggagc cggcacccaa cgtgacaaag gagtgcgggg tcaccgaaaga acccttctat  gccctcttct cctctctggg ctcttcttac atccctctgg cggctattct agtcatgtac  tgccgtgtct atatagtggc caagaacac accaagaacc tagaggcagg agtcatgaag  gagatgtcca actccaagga gctgacctg aggatccatt ccaagaactt tcacgaggac  acccttagca gtaccaaggc caaggccac aacccccagga gttccatagc tgtcaaaactt  ttaagtctt ccagggaataa gaaagcagct aagacgttgg gcatgtgtgt cggatgttct  atcttgtct ggtacctt gttacgtct ctaccgttg gctccttgtt ctcacacctg  aagcccccg acgctgtgt caaggtgtgt tctgtgctgg gctacttcaa cagctgcctc  aacccccatc tctaccatg ctccagcaag gatttcaagc gcgcttctgt gcgcatcctc  gggtgccagt gccgcgccg cggcgccgc cgacgcgcgc gccgcttct cctggcgccg  tgccctaca cctaccggc gtggacgcg ggcggctgc tggagcctc gcagtgcgc  aaggactgc tggacgacg cggcagctgc ctgagcgga gccagcgag cctgcctcg  gcctgcgga gccgggcta cctggcgcc ggcgcgccac gccagtcga gctgtgcgc  tccccgagt ggaaggcgc cggcgccctc ctgagcctgc ccgcgcctga gcccccgc  tgccggcgc gccacgact ggcgcctc ttcacctc agtctctgac cgagcccgag  agccccgga ccgacggcg gccacgaac ggaggtctgc agcccgcg gcagctggcc  aacggcgagc cggcttcaa aagcaacatg cccctggcg cgggcagtt ttagggcccc  cgtgcgagc tctcttccc tggggaggaa aacatcgtg ggggga  MNPDLTGHN TSAPAHWDEL KNAFTGPNQ TSSNSTLPQL DITRAISVGL VLGAFLIPAI P  VGNILVLSV ACNRLHRTPT NYFTVNLAMA DLLLSTFVLP FSAALEVLGY WVLGRIFCDI sapiens  WAAVDVLCCT ASILSLCAIS IDRYIGVRS LQYPTLVTRR KAILALLSW VLSTVISGP  LLGWKEPAPN DDKECVTEE PFYALFSSLG SFYIPLAVIL VMYCRVYIVA KRTTKNLEAG  VMKEMSNSKE LTLRIHSKNF HEDTLSTKA KGHNPRSSIA VKLFKFSREK KAAKTLGIVV  GMFILCWLPF FIALPLGLSF STLKPPDAVF KVVFWLGYFN SCLNPIIYPC SSKEFKRAFV  RILGCQCRGR GRRRRRRRR LGGCAYTYRP WTRGGSLEPS QSRKDSLDDS GSCLSGSQRT  LPSASPSPGY LGRGAPPPVE LCAFFEWKAP GALLSLPAPE PPRRRGRHDS GPLFTFKLLT  EPESPGTDGG ASNGGCEAAA DVANGQPGEK SNMPLAPQGF  gaattccgaa tcatgtgcag aatgctgaat cttccccag ccaggacgaa taagacagcg A  cggaagaaagca gattctcgtg attctggaat tgcattgttc aaggagtctc ctgattcttc  gcacccagct tcgggtaggg agggagtcgg ggtcccgccg taggcagcc cggcaggtgg  agagggtccc cggcagcccc gcgcgcccc ggcattgtct ttaatgcctt ccccttctat  gtggccttct gaggttccc agggctggcc aggttgttt cccaccccg gcgcgctct  cacccccagc caaacccacc tggcagggct cccctccagc gagacctttt gattccccgc  tcccgctc ccgcctccg gccagcccg gaggtggcc tggacagcg gacctcgcc  ggccccgctt gggaccatgg tgttctctc gggaaatgct tccgacagct ccaactgcac</p>	Homo sapiens
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38	Alpha 1c- adrenoceptor	NP_000671.1	379	<p> ccaaccgcgc gcaccggtga acatttccaa ggccattctg ctcggggtga tcttgggggg  cctcattctt ttcggggtgc tgggtaacat cctagtatc ctctccgtag cctgtcaaccg  acacctgcac tcagtcacgc actactacat cgtcaacctg gcggtggccg acctcctgct  cacctccacg gtctgacct tctcgccat cttcgaggct ctaggtact ggccttcgg  cagggtctc tgaacatct ggcgggcagt gtagtgcctg tctgcaccc cgtccatcat  ggcctctgc atcatctcca tgcacgccta catcgccgtg agctaccgc tgcgtacct  aaccatcgtc acccagagga ggggtctcat ggctctgct cactctccct  ggtcatatcc attggacccc tgttcggctg gaggcagccg gccccgagg acgagacct  ctgcagatc aacgaggagc cgggctacgt gctcttctca gcgctgggct cctctacct  gcctctggcc atcatcctgg tcatgtactg ccgctctac gtggtggcca agaggagag  ccggggccct aagtctggcc tcaagaccga caagtccgac tcggagcaag tgacgtccg  catccatcgg aaaaacgccc cggcaggagg cagcgggatg gccagcgcca agaccaagac  gcactctca gtgaggctcc tcaagtctc ccgggagaag aaagcgcca aaagctggg  catcgtggc ggctgcttgc tctctgctg gcgctgtt tcttagtga tggcattgg  gtctttctc cctgatttca agcctctga aacagttttt aaaatagtat ttggctcgg  atatctaac agctgcatca acccatcat ataccctgc tccagccaag agttcaaaaa  ggcctttcag atgtcttga gaatccagt tctccgaga aagcagtctt ccaaacatgc  cctgggctac accctgcacc cggccagcca ggccgtgaa gggaacaca aggacatgg  gcgcacccc gtgggatcaa gagagacctt ctacaggatc tccaagacgg atggcgtttg  tgaatggaaa ttttctctt ccatgccccg tggattgccc aggattacag tgcctaaaga  ccaatcctc tgtaccacag ccggtgtgag aagtaaaagg ttttggagg tctgctgctg  tgtagggcc tcaaccccc gccttgacaa gaaccatcaa gtccaacca ttaagggtcca  caccatctc ctacgtgaga acggggagga agtctaggac agaaaagatg cagaggaaaag  gggaataatc ttaggtacc acccacttc cttctcgaa ggccagctct tcttgagga  caagacagga ccaatcaaa aggggacctg ctgggaatgg ggtgggtgg agaccct  catcaggcag cgggtaggc acagggaaga gggaggtgt ctcaacca accagttcag  aatgatacgg aacagcatt cctgcagct aatgcttct tggcactct gtcaccact  caacgaaaac caccatgga aacagaatt catgcaaat ccaaaagact ataatatag  gattatgatt tcatcatgaa tatcttgagc acacactta agtttgagc tatctctga  tggaagtgag gggattttat tttcaggctc aacctactga cagccacatt tgacatttat  gccggaattc </p>	Homo sapiens
39	Alpha 2a- adrenoceptor	NM_000681	387	<p> ssnctqppap vniskaillg vilgllifg vlgnilvils vachrrhlshv p  adllltstvl pfsaifevlg ywafgrvfcn iwaadvlcc tasimglcii  plryptivtq rrqlmllcv walslvig plfgwrqpap edeticqine  gsfylvlplai lvmcrvyyv akresrlks glktdksdse qvtlrihrkn  aktkthfsvr llkfsrekka aktlgivvc fvlcwlppfl vmpigsffpd  vfwlglynsc inpiypcss qefkafqnv lrioclrkq sskhalgtytl  hkdmvripvg sretfyrisk tdgvcewfff lsmprgsari tvskdqssct  evcccvgsst psldknhqv tikvhtisls engeev  ggtcggcg cccaccagg ggacgccc gagacccc gcctccgtc cggctcctg a  gttcacctgc cccggccgc ctgaggacgg ggtgccttc atcgggcccc </p>	Homo sapiens

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40	Alpha 2a- adrenoceptor	AAA51664.1	<p>gctcacaaaa ggttaaatgga tggggggttac ctaggccctgg ctaattcccc tccattcccc  aactctctct ctctttttga agaaaaatgc taagggcagc cctgcctgcc ctecccatcc  ccgctgtgaa atatacata tttttgatag cacacatggg gcccacatat ctcttggcct  tggtttgat gttgaaatcc tggccttggg agagatgctc tccaggcaga cacagtgtc  tggttcaggc caagccccctt tgaatgcaa gccctttctg gtgttatgaa gtccctctat  gtcgtcgttt tcaccagcaa ctggtgactg tcccttgac acggacctgc tttgagattt  cctgacaggg aaaagatttc tgtccatttt tttcctgtgc ctaacagcat aattgccttt  tcctatgtaa atattatgat ggttgatcaa gacataagta aatgagcctt tctgcctcac  atcagccctg tgtataaagc cattattctc tgaagcactg tttgccccag taactcactt  taaaacctct ctttccagt ttcctctctc cctccaggg ccaactgctt aagaagaata  tgtatgtttc tatctttat gctgtgtgc cctcctgcc ccgaaagtc tgaactatggg  gaaatctttt agctgctgtt tttagactcc aaggagtga aattatgtg aagaagcaaa  cctgatacaa tttgccccag gtaaacagtt tgaagaagaa aatggcctg ccaactgta  cagtttcttc cccaagagct gttaggtatc aaaaattgtt cctttcccc ctcgtgtctt  ttctgggtga gatcatgtca ttgatgaact gcaaaagtca ggggaggagg gcagagactt  tgtgtttaca tctgcatctt tacatgtttt agacagagac aatttaaggc ctgactctt  atttcaacta agaaaaacta atgtcagcac atgttgctaa tgacagtga tttttttt  aataaaaaag tttacagatc aaatgtgaaa taaatatgaa tggagtgtc aaa  MGSLOPDAGN ASWNGTEAPG GGATATPYSL QVTLTLVCLA GLIMLLTVFG NVLVIIVFT P  SRALKAPQNL FLVSLASADI LVATLVIIPFS LANEMVGMWY FGKTCWEIYL ALDVLFTCTSS  IVHLCAISLD RWSITQAI EYNLKRTPRRI KAIITCWVI SAVISFPPLI SIEKKGGGGG  PQPAERPRCEI NDQKWYVISS CIGSFFAPCL IMILVYVRIY QIAKRRTRVP PSRRGPDAAV  APPGGTERRP NGLGPERSAG PGGAEEPLP TQLNGAGPEP APAGPRDTDA LDLESSSSD  HAERPPGPERR PERGPRGK GK ARASQVKPGD SLRGAGRRR GSGRRLLQGRG RSASGLPRRR  AGAGGQNLKX RFTFVLAVI GVFFVWFFP FFTYTLTAVG CSVPRTLKFK FFWFGYCNSS  LNPVIYTIEN HDEFRAFKKI LCRGDRKRIV</p>	Homo sapiens
41	Alpha 2b- adrenoceptor	NM_000682	<p>atggaccacc aggaccctca ctcctgtgcag gccacagcgg ccatagcggc ggccatcacc A  ttcctcatct cctttaccat cttcggcaac gctctgtgtca tcttggtgtg gttgaccagc  cgctcgtgac ggcgccctca gaacctgttc ctggtgtgctg tggccgcccgc cgacatcctg  gtggccacgc tcatcatccc tttctcgtc gccaacagcgc tgcctgggcta ctggtacttc  cggcgcacgt ggtgcgaggt gtacctggcg ctgcagcgtc tcttctgcac ctggtccatc  gtgcacctgt gcgccatcag cctggaccgc tactgggccc tgagccgccc gctggagtag  aactccaagc gcaccccgcg ccgcatcaag tgcatactcc tcaactgtgt gctcatcgcc  gccgtcatct cgctgcgccc cctcatctac aaggcgacc agggccccc gccgcgccc  cgccccagc gcaagctcaa ccaggaggcc tggtaacatc tggcctccag catcgatct  ttctttgtc cttgcctcat catgatcctt gtctacctgc gcatctacct gatcgccaaa  cgagcaacc gcagaggtcc cagggccaa ggggggccc ggcaggggtga gtccaagcag  ccccagccc accatggttg ggttttgccc tcagcaaac tgcagacctt gctctgtgtg  gcttctgcca gagaggtcaa cggacactcg aagtcacctt gggagaagg gaggggggag  acccctgaag atactgggac ccgggccttg ccaccagtt gggctgccct tcccaactca  ggccagggcc agaaggaggg tgtttgtggg gcactctcag aggatgaagc tgaagaggag</p>	Homo sapiens

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ttgcctgtga cctcttattg cgacatgcag gtggtgtttt tttttttt taaactctga  
gctattttat caataaagga tattttgtaa taag

Homo

LVSIAAADIL P

RSLRAPQNLF

ALVILAVLTS

FLILFTIFGN

ATAAIAAAT

NP\_000673.1

Alpha 2b-

388

42

adrenoceptor	Alpha 2c- adrenoceptor	389	43	NM_000683	sapiens	sapiens
VATLIIPSL	ANELLGYWF	RRTWCEVYLA	LDVLFCTSSI	VHLCALSLDR	YMAVSRALRY	
NSKRTPRRIK	CIILTWLIA	AVISLPLLIY	KGDQGPQPRG	RPQCKLNQEA	WYILASSIGS	
FFAPCLIMIL	VYLRIYLIK	RSNRRGPRAK	GGPGQGESKQ	PRPDHGALA	SAKLPAALASV	
ASAREVNGHS	KSTGEKEGE	TPEDTGTRAL	PPSWAALPNS	GQKQKEGVCG	ASPEDEAESEE	
EEEEEEEEEC	EPQAVPVSPA	SACSPPLQQP	QGSRLGRVGL	QGVLLGRVGV	AIGGQWRRRR	
AHVTREKRFT	FVLAWIGVF	VLCWFPPFFFS	YSLGAICPKH	CKVPHGLFQF	FFWIGYCNSS	
LNPVIYTIEN	QDFRRAFRRI	LCRPWTQTAW				
	ctgcaggcgg	ccttgagggg	ggcgccctctg	ccgagcgcg	gccccgcgc	A
	actctcccc	ggcgccgcgc	ggcgaggttc	gaccaggcgg	ccgcgggctc	cggtccccgg
	ccagctcccc	agggccccgc	ggccccccgc	ccgcgcgcgc	gccccgcgc	gctaaactga
	cccaagtgtg	aagccgateg	caggcgccgc	cactcgccgc	cagcgagggc	ggcgcgcgcg
	ggcgcgcg	agctccggcg	agcgaggcgg	cgcccgccgc	gcaagcgtgg	accgcggggg
	ggcgccgcgc	cgggagcagc	cgaggagctc	cgggcgccgc	cgccggccgc	cccgggaaaag
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	ggcgcgcgca	ggcctagccg	ccggatggga	ggcggaacgc	ccggcgccgc	ggcgccctgt
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	ggctcgcggtg	ggctcgccgc	ggggggcgctc	ccgtgagccg	ggcgagggcg	ggggcgcgca
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	ctgctctgca	cttacacgct	cggcagctgc	ggggagcccc	gcagccacgc	tctccggcgc
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	cgcgggctgc	gccccggctc	caggaggggc	ggcgtagccc	cggggaggac	catggcgctc
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	ggccagtgct	cgggcgggcg	gggtggcagg	ctggctggcg	tggtgggctt	cctcatcgct
	ttcaaccgtg	tgggcaacgt	gctgggtggg	atcgccgtgc	tgaccagccg	ggcgctgcgc
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	tgccggcggtg	acctggcgct	cgatgtgctg	tttggacact	cgtcgatcgt	gcatctgtgt
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	ctcagcgaga	agcgcgcccc	cgtggggccc	gacgggtgcgt	ccccgactac	cgaaaacggg
	ctggggcgcg	cggcaggcga	ggcgagaacg	ggcgactgcgc	gcccccgccc	ggcgacgtgg
	agccggacga	gagcagcgca	gcggccgaga	ggcgccgcgc	cggggcggtt	ggcgcggggc
	ggcgcgcgcc	gagcgggcgc	ggaggggggc	ggcgccggtg	ggcgagggca	ggggcggggg
	ccggggggcg	ctcagtcggg	ggcgctgacc	gctccaggtt	ccccggggcc	cggtggccgc
	ctctcgcgcg	ccagctcgcg	ctccgtcgag	ttcttctgt	cgcgccggcg	ccggggcgcc
	agcagcgtgt	ggcgccgcaa	ggtggccca	ggcgcgaga	agcgttccac	ctttgtgctg

44	389	Alpha 2c- adrenoceptor	NP_000674.1	<p>gctgtgtgta tgggcgtgtt cgtgctctgc tgggtccctt tcttcttcat ctacagcctg  tacggcatct gccgcgaggc ctgccaggtg cccggccccc tcttcaagtt ctctctctgg  atcggtact gcaacagctc gctcaacccg gtactctaca cggctcttcaa ccagatttc  cgccatctt tcaagcacat cctcttccga cggagtgagaa tgggcttcag gcagtgaactc  gcacccgtct gggaatcctg gacagctccg cgtcggggc tgggcagaa ggcgggcccc  gacgcggggg agctttccca gagaccggg gagctttccc agagaccgg gcatgattg  gcctccagg cgaggggag ggtcggcag ggcaggagct tggcagagag atagcgggc  tccagggaat ggggaggaga gagggggaga cccctttgcc tccccctc agcaaggggc  tgcttctggg gctccctgcc tggatccagc tctggagacc ctgccaggt gtgctgtga  ggtcagggtt ttagagagca gtggcagag tagcccccta aatgggcaag caaggagccc  ccaaagaca ctaccactcc ccatccctgt ctgaccaagg gctgacttct ccaggaccta  gtcggggggg ggtgcccagg gggcaaggag aaagcacoga caatctttga ttactgaaag  tatttaaatg ttgccaata acaacagcca aaacaaccaa actattttct aaataaacct  ttgtaa</p>	Homo sapiens
45	599	Bradykinin B1 Receptor	NM_000710	<p>LIVFTVVGNV LVIAVLTSR ALRAPQNLFL VSLASADILV ATLMPFSLA NELMAYWYFG  QVWCGVYIAL DVLFTSSIV HLCALSLDRY WSVTQAVEYN IKRTPRRVKA TIVAVWLISA  VISFPPLVSL YRQPDGAAYP QCGLNDETWY ILSSCIGSFF APCLIMGLVY ARIYRVAKRR  TRTLSEKRAP VGPDGASPTT ENGLGAAAGE ARTGTARPRP PTWSRTRAQ RPRGGAPGPL  RRGRRRRAGA EGGAGGADGQ GAGPGAQSG ALTASRSPG GRLSRASSR SVEFFLSRRR  RARSVCRRK VAQAREKRFT FVLAVVMGVF VLCWFPPFFI YSLYGICREA CQVPGPLFKF  FFWIGYCNSS LNPVIYTVFN QDFRPSFKHI LFRRRRRGRF Q</p>	Homo sapiens
45	599	Bradykinin B1 Receptor	NM_000710	<p>ctgtgcatgg catcatcctg gccctctcta gagctccaat cctccaacca gagccagctc A  ttccctcaaa atgtacggc ctgtgacaaat gctccagaag cctgggacct gctgcacaga  gtgctgccga catttatacat ctccatctgt ttcttcggcc tcttagggaa cctttttgtc  ctgttggtct tcctcctgcc ccggcgggcaa ctgaacgtgg cagaaatcta cctggccaac  ctggcagcct ctgatctggt gttgtcttg gcttgccct tctgggcaga gaatatctgg  aaccagtta actggcctt cggagccctc ctctgcctg tcatcaacgg ggtcatcaag  gccaatgtt tcatcagcat ctctctggtg gtggccatca gccaggaccg ctaccgcgtg  ctggtgcacc ctatggccag cggaaaggcag cagcggcgga gccaggcccc ggtcacctgc  gtgctcatct gggttgtggg gggcctcttg agcatccca cattcctgct gcgatccatc  caagccgtcc cagatctgaa catcacgcc tgcacctgc tccctccca tgaaggcctgg  cactttgcaa ggattgtgga gttaaatatt ctgggtttcc tctaccact ggtgcgcatc  gtcttcttca actaccacat cctggcctcc ctgcgaacgc gggaggaggt cagcaggaca  agagtgcggg ggcgaagga tagcaagacc acagcgtga tctcacgtc cgtggttgcc  ttcctggtct gctgggccc ttaccactc ttgacctcc tggaaattct attccaggtg  caagcagtc ccaggtgctt ttggaggagc ttcatgacc tgggctgca atbggccaac  ttcttgctt tcaactaacg ctccctgaat ccagtaattt atgtctttgt gggccggctc  ttcaggacca aggtctggga actttataa caatgaccc ctaaaagtct tgctccaata  tcttcatccc ataggaaaga aatcttccaa cttttctggc ggaattaaaa cagcattgaa  cc</p>	Homo sapiens

46	599	Bradykinin B1 Receptor	NP_000701.1	MASSWPPLLEL QSSNQSLFP QNATACDNAP EAWDLLHRVL PTFIISICFF GLLGNLFLVLL P	Homo sapiens
				VFLPRLRQLN VAEIYLANLA ASDLVFVLGL PFWAENWNQ FNPFFGALLC RVINGVIKAN	
				LFISIFLVVA ISQDRYRLV HPMASGRQQR RQARVTCVL IWWVGLLSI TFFLLRSIQ	
				VPDLNITACI LLLPHEAWHF ARIVELNIG FLPLAAIVF RNYHILASIR TREEVSRTRV	
				RGPKDSKTTA LILTLWAFI VCWAPYHFFA FLEFLFQVQA VRCGFWEDEFI DLGLQLANFF	
				AFTNSSLNVP IYVFVGRLEF TKVWEIYKQC TPKSLAPISS SHRKEIFQLF WRN	
47	600	Bradykinin B2 Receptor	NM_000623	atgttctctc cctggaagat atcaatgttt ctgtctgttc gtgaggaactc cgtgcccacc A	Homo sapiens
				acggcctctt tcaagcgcga catgtctaat gtcaccttgc aaggggcccac tcttaacggg	
				acctttgccc agagcaaatg ccccaagtgc ggtgggctgg gctgggtcaa caccatccag	
				cccccttcc tctgggtgct gttcgtgctg gccaccctag agaaccatctt tgtcctcagc	
				gtcttctgcc tgcacaagag cagctgcacg gtggcagaga tctacctggg gaacctggcc	
				gcagcagacc tgatcctggc ctgcggggctg ccttctggg ccatcaccat ctccaacaac	
				ttcgactggc tctttgggga gacgtctgc cgcgtgggga atgccattat ctccatgaac	
				ctgtacagca gcatctgttt cctgatgctg gtgagcatcg accgctacct ggccctgggtg	
				aaaaccatgt ccatgggccc gatgcggcg gtgcgctggg ccaagctcta cagcttgggtg	
				atctgggggt gtacgtgct cctgagctca ccatgctgg tgttccggac catgaaggag	
				tacagcgatg agggccacaa cgtcacccgt tgtgtcatca gctacccatc cctcatctgg	
				gaagtgttca ccaacatgct cctgaatgtc gtgggcttcc tgctgcccc gagtgtcatc	
				accttctgca cgtgcagat catgcaggtg ctgcggaaca acgagatgca gaagtccaag	
				gagatccaga cggagaggag ggccacgggt ggctgctgg tgtgtctgt gctattcatc	
				atctgtggc tgccttcca gatcagcacc ttctgggata cgtgcatcg cctcggcatc	
				ctctccagct gccaggacga gcgcacatc gatgtaatca cacagatcg cctctcatg	
				gcctacagca acagctgct caaccactg gtgtactga tctgtggcaa gcgttccga	
				aagaagtctt gggagggtga ccaggagggtg tgcagaaaag ggggctgcag gtcagaaacc	
				attcagatgg agaactccat ggccacactg cggacctcca tctcctgga acgccagatt	
				cacaaactgc aggaactggc agggagcaga cagtgcagca acgccagcag ggtgctgtg	
				aatttgtga aggattgag gacagtgtgt ttccagcatg ggcccaggaa tgcgaaggag	
				acatctatgc acgaccttg gaaatgagtt ggtgtgagg atggggtgaa ctacgcaca	
				tcctgacctg cccaattttg caggagcat ggctgtgagg tttgttcttat ttgctgccac	
				gccaaaggact ccaaaatcac aacagcatta ctgttcttat ttgctgccac acctgagcca	
				gcctgctect tcccaggagt ggaggaggcc tggggggagg gagaggagt actgagcttc	
				cctcccgtgt gtctccgtc cctgccccag caagacaact tagatctcca ggagaactgc	
				catccagctt tgggtgcaatg gctgagtga caagtgaatt gttgccccgg gtttcttaa	
				tctattcagc tagaactttg aaggacaatt tcttgcatata ataaaggta agccctgagg	
				ggtccctgat aacaacctgg agaccaggat ttatggctc cctcactga tggacaagga	
				ggtctgtgcc aagaagaat ccaataagca catatgagc acttctgta tatgcagtat	
				tgagcactgt aggcaagacc caagaaagag aaggagccat ctccatcttg aaggaaactca	
				aagactcaag tgggaacgac tgggcactgc caccaccaga aagctgttcg acgagacggt	
				cgagcagggt gctgtgggtg atatggacag cagaaggggg agaccaaggt tccagctcaa	
				ccaataacta ttgcacaacc acctgtccct gcctcagttc ccttttatgt aacatgaagt	
				cgttgtgagg gttaaaggca gtaacaggta taaagtactt agaaaagcaa aggtgtgctac	

48	Bradykinin B2 Receptor	NP_000614.1	<p>gtacatgtga ggcatcatta cgcagacgta actgggatat gttactata aggaagaagac  actgaggtct agaaatagct cgtggagca gaatcagtat tgggagcgg tggcgggtgtg  aagcaccagt gtctggcaca cagtaggtgc tcattggctc ccttcacact gtcattccca  ccacctgag gcccaaccg ccacacacac agagcattt ggagagaagg ccattgtcttc  aaagtctgat ttgtgatgag gcagaggaag atatttctaa tcgggtcttgc ccagaggatc  acagtctga gacccccac caccagccgg tacctgggaa gggggagagt gcaggcctgc  tcagggactg ttctgtctc agcaaccaag ggattgttc tgcataatcaa tggtttatgtg  gaagtggtcc cagtatgagc cctagaagag tgtgaaaagg aatggcaatg gtgttcacca  tcggcagtgc cagggcagca ctcatctact tgataaatga atatttatta gctggtttgga  gagctagaac ctggagagct agaacctgga gaactagaac ctggagggtc agaacctgga  gaggctagaa ccaagaagg ctagaacctg gaggggctag aacctagaga agctaaaaacc  tgagctagaa gctggaggac tagaacctgg agggctggaa tctgaagggc tagaacctgg  aggctggaa tctggagagc tagaacctgg agggctagaa cctggagggc tagaacctag  aaggctaga acctggagg ctggaatctg gagagctaga acctggagg ctgaacctg  gaggctaga acctgaagg gctagaacct ggagggctag aacctggag gttagaacct  agaagggcta gaacctggag agccagaacc tggagggcta gaacctggaa gggctagaac  ctgtagagct agaactgga gactagaac ccggcaggct agaacctggc aagctagaac  ctggagggaa tgaacctgga gggctagaac ctggagaatg agaaaaattt acatggcaaa  gagcccataa atcctgacca atccactct gaatttttaa gcaaaagcgt gaaaaaaag  attccctctt taccaccaac ccactctttt tcccaaccac ccactctct ctgctcagt  aagtatctgg aggaagaaaa caggtgaaag aagaatgaaa aaccttttag tattagttat  agaatgaagt caaactgtgc cacacatggt gaatgaaaaa aaaaaaaagg aggcctgtgt  ttgtcacaca gggcagtcct tcagcaccag agcacgtgat ggtctgagac tctcttagga  gcagagctct gccgcaatg ccattgtggg atccacacct ggtctgaggg gcaactgagt  ctgcgggaga agagcggcc tatgcatggt gtagatgcc tgaataagaa catctgtcct  gtgaaaagact caatgagctg ttatgttcta aacagggaagc atttcacatc caaacgagaa  aatcatgtaa acatgtgtct ttctctgata gcataataaa tggatgaggt ttttgcaaaa  aaaaaaaaa aaa</p>	<p>TFQSKCPQV EWLGLNTIQ P  AADLILACGL PFWAITISNN  KTMGMGRMG VRWAKLYSIV  EVFTNMLLN VGFLPLSVI  ICWLPFQIST FLDTLRLGI  KKSWEVYQGV CQKGGCRSEP</p>	Homo sapiens
49	Beta-1 adrenoceptor	NM_000684	<p>tgctacccgc gcccggtctt ccccaaccac ggcccagccc tgccacacc A  cccgcccccgc gcctccgcag ctcggcatgg gcgcgggggt gctcgtcctg ggcgcctccg  agccccgtaa cctgtcgtcg gccgaccgc tccccgacgg gcggcgccacc ggcggcgggc  tgctgtgtcc gcgctgcgcg ccgcctcgt tgcctgcctc gcgcagcgaa agccccgagc  cgctgtctca gcagtgagca gcgggcatgg gctcgtctat ggcgtcatc gtgctgtca  tcgtggcggg caatgtgctg gtgatgtgg ccatacga gacgcggcg ctgcagagcg</p>	<p>cccccaaccac  gcgcgggggt  tccccgacgg  tgcctgcctc  gcgcagcgaa  ggcgtcatc  ggcgtcatc  ggcgtcatc</p>	Homo sapiens

50	Beta-1 adrenoceptor	NP_000675.1	635	<p> taccacacat cttcatcatg tccctggcca ggcgcgaact ggatcatggg ctgctggtgg  tgccgttcgg gcccaccatc gtggtgtggg gccgttggga gtacggctcc ttcttctgag  agctgtggac ctacgtggac gtgctgtgag tgacggccag catcgagacc ctgtgtgtca  ttgccctgga ccgtacatc gccatcacct cgcctctccg ctaccagagc ctgctgacgc  gcgcgcgggc gcggggccct gtgtgcaccg tgtgggcat ctcgccctg gtgtccttcc  tgccatcct catgcaactg tggcgggcg agagcgacga ggcgcgcgc tgcatacaacg  accccaagt ctgcgacttc gtcaccaacc ggcctacgc catcgccctg tccgtagctc  ccttctacgt gccctgtgc atcatggcct tctgttacct cgggtgttcc cgcgaggccc  agaagcaggt gaagaagatc gacagctgc agcgcgttt cctcgccgc ccagcgcgc  cgccctgcc ctgcctcgc ccgtccccc cgcgcgcgc gccgcgcga ccccgccgc  cgccgcgcgc cgccgccacc gcccgcctg ccaacggcg tgcgggtaag cggcgccct  cgccctcgt ggcctacgc gacgagaag cgtcaagac gctgggcatc atcatggcg  tcttcacgt ctgctggctg ccttcttcc tggcgaact ggtgaaggcc ttccaccgcg  agctgtgccc cgaccgctc ttgtcttct tcaactggct gggctacgc aactggcct  tcaaccccat catctactc cgacgccc acttcgcaa ggccttcag ggactgctct  gctgcgcgc cagggtgccc cgccggccc acgcgacca cggagaccgc cgcgcgcct  cggtgtgtc ggcgcgcgc ggaacccc catcgccc ggcgcctcg gacgacgag  acgacgatgt cgtcggggc agccgcgcgc cgcgcctgt ggaaccccg gccgctgca  acggcggggc ggcgcggac agcactcga gcttgacga gccgtgcgc cccgcttcg  cctcggaatc caaggtgtg ggcgcgcgc gggcgcgga ctcggggcac ggcctccag  gggaacgag agatctgtgt ttactaaga cgaatagca ggaactcga agccacaat  cctcgtctga atcactcag gcaagagaa agccacgga cgttgaca aaaaggaaaag  ttgggaag gatggagag tggctgtgt atgttcctg ttg </p>	Homo sapiens
51	Beta-2 adrenoceptor	NM_000024	640	<p> MGAGLVLGA SEPNLSSAA PLPDGAATAA RLIVPASPFA SLPPASESP EPLSQWTAG P  MGLMALIVL LIVAGNLVI VAIKTPRLQ TLNLFIMSL ASADLMGLL VVFFGATIVV  WGRWEYGSFF CELTWSVDVL CVTASIELC VIADRYLAI TSPFRYQSL TRARAGLVC  TVWALSALVS FLPILMHWR AESDEARCY NDPKCDFTV NRAYAIASSV VSFVPLCIM  AFVYLRVFRE AQKQVKIDS CERRFLGGPA RPPSPSPV PAPAPPFP RPAAAAATAP  LANGRAGRR PSRLVALREQ KALKTLGIIM GVFTLCWLPF FLANVKAFF RELVDPDLFV  FFNLGYANS AFNPIIYCRS PDKFAFQGL LCCARRARR RHATHGDRPR ASGCLARPGP  PPSPGAASDD DDDVVVGATP PARLLEPWAG CNGGAAADSD SSLDEPCRP FASESKV  actgcgaag ggcttctca gagcacgggc tggactggc aggcacgcg agccctagc A  accgacaag ctgagtgtgc aggcagatc ccacacac ccacacac gccgctgaat  gaggttcca ggcgtccgt cgcgcgcgc agagccccc cgtgggtccg cccgtgag  cgcccccagc cagtgcgtt acctgccga ctcgcgcga tggggcaacc cgggaacgc  agcgcctct tctggcacc caatagaagc catgcgcgc accacgact caccagcaa  agggacgag tgtgggtggt gggcatggc atcgtcatgt cctcctcgt cctggccatc  gtgtttggca atgtgtggt catcacagc attgccaagt tcatgctgt gcagacggtc  acaaactact tcatcactc actggcctgt cgtgatctg tcatggcct gcagtggtg  cccttgggg ccgccatat tctatgaa atgtggact ttggcaact ctggtgcgag  tttggactt ccattgatgt gctgtgctc acggccagca ttgagacct gtgctgac </p>	Homo sapiens

52	Beta-2 adrenoceptor	NP_000015.1	<p>gcagtggatc gctactttgc cattaacttca cctttcaagt accagagcct gctgaccaag  aataaggccc gggatgatcat tctgatgggtg tggattgtgt caggccttac ctcttcttgg  ccatttcaga tgcactggta ccgggccacc caccaggaaag ccatcaactg ctatgccaat  gagacctgct gtgacttctt cactgaaccaa gctacttcca ggttcttcca cactgtgtcc  ttctacgttc cctgggtgat catggtcttc gtctactcca ggttcttcca gtaggccaaa  aggcagctcc agaagattga caaatctgag ggcgcttcc atgtccagaa ccttagccag  gtggagcagg atggcgagac ggggcatgga ctccgcagat cttccaaagt ctgcttgaag  gagcacaag cctcaagac gttaggcatc atcatgggca cttcacctt ctgctggctg  cccttctca tggtaacat tggcatgtg atccaggata acctcatccg taaggaaagt  tacatctcc taaattggat aggtatgtc aattctggt tcaatcccc tatctactgc  cggagccag atttcaggat tgcctccag gagcttctgt gcctgcgcag gtcttcttgg  aggcctatg ggaatggcta ctccagcaac ggcaacacag gggagcagag tggatatcac  gtggaacagg agaaagaaaa taaactgctg tgtgaagacc tcccaggcac ggaagacttt  gtgggccatc aggtactgt gcctagcgt acattgatt cacaaggag gaattgtagt  acaaatgact cactgctga agcagtttt tctactttta aagaccccc ccccccaac  agaacactaa acagactatt taacttgagg gtaataaact tagaataaaa ttgtaaaaaat  tgtatagaga tatgcagaag gaaggcctc ctctgctt ttatttttt ttaagctgta  aaaagagaga aaacttattt gactgattat ttgtatttg tacagttcag ttcctctttg  catggaattt gtaagtttat gtctaaagag cttagtctt agagacctg agtctgctat  atttcatga ctttccatg tatctacctt actattcaag tattaggggt aatatattgc  tgctggtaat ttgtatctga aggagatttt cctctctaca ccttggact tgaggatttt  gagtatctcg gacctttcag ctgtgaacat ggactcttcc cccactctc ttatttgcct  acacggggtg ttttaggcag ggatttgagg agcagcttca gttgttttcc cgagcaaaag  tctaagttt acagtaata aatgtttga ccatg</p>	Homo sapiens
53	Beta-3 adrenoceptor	NM_000025	<p>gctactctc ccccaagagc ggtggcaccg agggagtgg ggtgggggga ggctgagcg A  tctggctggg acagctagag aagatggccc aggtgggga agtgcctc atgcctgtct  gtccctccc ctgagccagg tgatttgga gacccctcc ttccttctt cctaccgcc  ccacgcgga cccgggagtg gctccgtggc ctccagagaa cagctctctt gccccatggc  cggacctccc caccctggcg cccaataccg ccaacaccag tgggctgcca ggggttccgt  gggagcgggc ctagccggg gcccgtgctg cgtggcggt cctggccacc gtgggagga  acctgctggt cactgtggcc atcgctgga ctccgagct ccgagacctg accaactgt  tcgtgacttc gctggccgca gccgacctgg tgatgggact cctgggtgtg ccgccggcg  ccacctggc gctgactggc cactggcctg tggcgccac tggctggag ctgtggacct  cgggtggact gctgtgtgtg accgcagca tggaaacctt gtgcgcctg gccgtggacc</p>	Homo sapiens



[illegible]

55	688	Opsin, blue-sensitive	NM_001708	<p>CRCGRRRLPPE PCAAARPALF PSGVPAARSS PAQPRLCQRL DGASWGV</p> <p>ggcatccatg agaaaaatgt cggaggaaga gttttatctg ttcaaaaata tctcttcagt A</p> <p>ggggccctgg gatgggcctc agtaccacat tgccccctgc tgggccttct accctccaggc</p> <p>agctttcatg ggcactgtct tcttatagg gtccccactc aatgccatgg tgcgtgtggc</p> <p>cacactggc tacaaaaagt tggcgagcc cctcaactac attctggta acgtgtcctt</p> <p>cggaggcttc ctccctctga tcttctctgt cctccctgtc ttctgtgcca cgtgtaacgg</p> <p>atacttcgtc ttcggtcgcc atgtttgtgc tttagggggc ttccctggga cgttagcagg</p> <p>tctggttaca ggatgggtcac tggccttctt ggcctttgag cgctacattg tcatctgtaa</p> <p>gcccctcggc aacttcgctc tcaagtccaa gcatgcactg acggtggtcc tggctacctg</p> <p>gaccattggt attggcgtct ccatcccaacc cttctttggc tggagccgggt tcatccctga</p> <p>gggacctgag tgttccctgt gccctgactg gtacacctg ggcaccaa accgcagcga</p> <p>gtccatacag tggttcctct tcatcttctg cttcattgtg cctctctccc tcatctgctt</p> <p>ctcctacact cagctgtga gggccctgaa agctgttga gctcagcagc aggagtcagc</p> <p>tacgacccag aagcgtgaac gggaggtgag ccgcatggtg gttgtgatgg taggatcctt</p> <p>ctgtgtctgc tacgtgccct acgcgccctt cgcctatgtc atggtcaaca accgtaacca</p> <p>tgggctggac ttacggcttg tcaccattcc ttcattcttc tccaaagagt cttgcatcta</p> <p>caatcccatc atctactgct tcatgaataa gcagttccaa gcttgcatca tgaagatggt</p> <p>gtgtgggaag gccatgacag atgaatccga cacatgcagc tcccagaaaa cagaagtctt</p> <p>tactgtctcg tctacccaag ttggccccc aaatattggtc tgtttgcaac</p> <p>agctgaatt aaattttact t</p>	Homo sapiens
56	688	Opsin, blue-sensitive	NP_001699.1	<p>MRKMSEEFY LFKNISSVGP WDGPQYHIAP VWAFYLAQAF MGTVFLIGFP LNAMVLVATL P</p> <p>RYKKLRQPLN YILNVVSFGG FLICFISVFP VFVASCNGYF VFGRHVCALE GFLGTVAGLV</p> <p>TGWSLAFIAF ERYIVICKPF GNFRFSSKHA LTVVLATWTI GIGVSIPPF GWSRFIPEGL</p> <p>QCSCGPDWYT VGTKYRSESY TWFLIFCFI VPLSLICFSY TQLLRALKAV AAQQQESATT</p> <p>QKAEREVSRM VVMVGSFCV CYVPYAAFAM YMVNNRNHGL DLRLVTIPSF FSKSACIYNP</p> <p>IIYCFMKNQF QACIMRMVCG KAMTDESDTC SSQKTEVSTV SSTQVGP</p> <p>gagtatctgg atgtcttggg ttttctccc attctgttct gttctgttct cctaatacca A</p> <p>tctcgttact agacgtaggc atggagctg acaatcaact gcatttgaac tgagaagaag</p> <p>aaatattaaa gacacagtct tcagaagaaa tggctcaaa ggcagctcac tcacctaatc</p> <p>agactttaat ttcaatcaca aatgacacag aatcatcaag ctctgtggtt tctaacgata</p> <p>acacaaaataa aggatggagc ggggacaact ctccaggaat agaagcattg tgtgccatct</p> <p>atattactta tgcgtgtatc atttcagtgg gcactcttgg aaatgctatt ctcatcaaa</p> <p>tctttttcaa gaccaaatcc atgcaaacag ttcaaatat tttcatcacc agcctggctt</p> <p>ttggagatct tttacttctg ctaacttgtg tgcagtgga tgcacactac taccttgcag</p> <p>aaggatggct gttcggaaga attggttga aggtgctctc ttctatccgg ctacttctg</p> <p>ttgggtgtgc agtgttcaca ttaacaattc tccagctga cagatacaag gcagttgtga</p> <p>agccacttga gcgacagccc tccaatgcca tctgaagac ttgtgtaaaa gctggctgcg</p> <p>tctggatcgt gtctatgata ttgtctctac ctgagggctat attttcaaat gtatacactt</p> <p>ttcgagatcc caataaaaat atgacatttg aatcatgtac ctcttatcct gtcttaaga</p> <p>agctcttga agaaatacat tctctgtgtg gttcttagt gttctacatt attccactct</p> <p>ctattatctc tgtctactat tcttgattg ctaggaccct ttacaaaagc accctgaaca</p>	Homo sapiens
57	692	Bombesin Receptor Subtype-3	NM_001727		Homo sapiens

Homo  
sapiens

58 692 NP\_001718.1 Bombesin Receptor Subtype-3  
 MAQRQPHSPN QTLISITNDT ESSSVVSND NTNKGWSDN SPGIEALCAI YITYAVIISV P  
 GILGNAILIK VFFKTKSMQT VFNIFITSLA FGDLLLLLITC VPVDATHYLA EEWLFGRIGC  
 KVLSEIRLTS VGVSVFTLTI LSADRYKAVV KPLERQPSNA ILKTCVKAGC VMIVSMIFAL  
 PEAFISNVYT FRDPNKNMTE ESCTSYFVSK KLLQEIHSLL CFLVFIYIPL SIISVYYSLI  
 ARTLYKSTLN IPTEEQSHAR KQIESRKRIA RTVLVLVALF ALCWLPNHLI YLYHSFTSQT  
 YVDPSTAMHFI FTIFSRVLA FNSCNPFAL YWLSKSFQKH FKAQLFCCKA ERPEPPVADT  
 SLTTLAVMGT VPGTGSIQMS EISVTSFTGC SVKQAEIDRF

Homo  
sapiens

59 729 NM\_001716 CXC Chemokine Receptor 5  
 gctgccacct ctctagagg acctggcggg gaggctctca acataagaca gtgaccagtc A  
 tggtagactca cagccggcac agccatgaac taccogctaa cgctggaaaat ggacctcgag  
 aacctggagg acctgttctg ggaactggac agattggaca actataacga cactctccctg  
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60	729	CXC Chemokine Receptor 5	NP_001707.1	<p> tctaatacat ccaatgctca agaacaact tctactcttg cctttgcca cggagagcgc  ctgcccctcc cagaacacac tccatcagct tagggctgc tgacctccac agcttccccct  ctctcctcct gccacacctg caaacaagc cagaagctga gcaccaggcg atgagtggag  gttaaggctg aggaagggcc agctggcagc agagtgtgc ctctggacaa ctacgtccct  aaaaacacag acattctgcc agggcccca tagctcagtc acttgacca agcaggaagc  tcagactggg tgagttcagg tagctgcccc tggctctgac cgaacacagc ctgggtccac  cccatgtcac cggatcctgg gtggtctgca ggcagggtg actctaggcg cctttggagg  ccagccagtg acctgaggaa gctgaaggc cgagaagca gaaagaaacc cgacagaggg  aagaaaagag ctttcttccc gaaccccaag gagggagatg gatcaatcaa acccggcggg  ccctccgccc aggcagatg ggggtggggtg gagaactcct aggtggctg ggtccagggg  atgggaggtt gtgggcattg atggggaag aggtggctt gtccccctc cactccccct  ccataagcta tagaccgag gaaactcaga gtcggaacgg agaaaggctg actggaaggg  gccgtggga gtcactcaca ccatccccct cgtggcatca ccttaggcag ggaagtgtaa  gaaacacact gaggcaggga agtccccagg cccacggaa gcgtgccccg cccccgtgag  gatgtcactc agatggaacc gcaggaaagt cctccgtgct tgtttgctca cctggggtgt  gggaggcccc tccggcagtt ctgggtgctc cctaccact cccagcctt tgatcaggtg  gggagtcagg gacccctgcc ctgtcccaac tcaagccaag cagccaagct ccttgggagg  ccccactggg gaaataacag ctgtggctca cgtgagagtg tcttcacggc aggaacaaga  ggaagcccta agacgtccct ttttctctg agtatcctc cgcaagctgg gtaatcgatg  gggagtcctg aagcagatgc aaagaggcaa gaggtcggat ttggaatttt ctttttaata  aaaaggcacc tataaaacag gtcaatacag tacaggcagc acagagacc ccggaacaag  cctaaaaaatt gtttcaaat aaaaaccaag aagatgtctt caaaaaaaa aaaaaaaa  aaaa </p>	Homo sapiens
61	735	C-C Chemokine Receptor 1	NM_001295	<p> SESENATSLT TF  ggcacgagcc cagaacaaa gacttcacgg acaaaagtcctc ttggaaccag agagaagccg A  ggatggaaac tccaaacacc acagaggact atgacacgac cacagagttt gactatgggg  atgcaactcc gtgccagaag gtgaacgaga gggcctttgg ggcacaaacty ctgccccctc  tgtactcctt ggtatttgc attggcctgg ttggaacat cctggtggtc ctggtccttg  tgcaatacaa gaggctaaaa aacatgacca gcatctacct cctgaacctg gccatttctg  acctgctctt cctgttccag ctccccctct ggatcgacta caagtgaag gatgactggg  tttttgggtg tgccatgtgt aagatcctct ctgggtttta ttacacagc ttgtacagcg  agatcttttt catcatcctg ctgacgattg acaggtaact ggcacatgac cagccgtgt  ttgccttgcg ggcacggacc gtcacttttg gtgtcatcac cagcatcatc atttggggcc  tgcccatctt ggcttccatg ccaggcttat acttttccaa gacccaatgg gaattcactc  accacacctg cagccttcac ttctctcagc aaagctacg agagtgaag ctgtttcagg </p>	Homo sapiens

62	735	C-C Chemokine Receptor 1	NP_001286.1	ctctgaaact gaacctcttt gggctgggtat tgcctttgtt ggtcatgata atctgtata caggattat aaagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtccgtt tgattttgt catcatgac atctttttt tcttttgac cccataaat ttgactatac ttattttgt ttccaagac ttctgttca cctatgagt tgaagagac agacatttgg acctggctgt gcaagtgaag aggtgtatc cctacacga ctgctgtgc aaccagtg tctacgctt cgtgtgtg aggttcgga agtacctgc gcagttgtt cacagcggtg tggctgtgca cctggttaa tggctccct tctctccgt ggacaggctg gagagggtca gtccacatc tccctccaca gggagagcat aactcttgc tgggttctga ctcagaccat aggaggccaa cccaaaataa gcaggcgtga cctgccaggc acatgagcc agcagcctgg ctctccagc caggttctga ctctggcac agcatggagt cacagccact tggatagag agggaatga atgggtgctt ggggttctg aggttctgg ggcttcagt tttccatga actctccc tggtagaaag aagatgaatg agcaaaaca aatattccag agactgggac taagtgtacc agagaagggtc ttggactca gcaagattt agatttga ccatagcat ttgtcaaca agtccccac ttccactat tctgttga aaccaattaa accagtagt ggtgactgt ggtccattc aaagtgaat cctaaagccat gggagacact gatgatgag gaatttctg tctccatca cctccccc cccgccacc tccactgcc aagaacttgg aaatagtat tccacagt actccactt ggtccaga gccaatcagt agcagcactc tgctccct tcactccc cgcaggattt gggctcttg aatcctggg aacatagaac tcatgacgga agattgaga cctaacgaga aatagaaatg gggaaactac tctggcagt ggaactaaga agcccttag gaagaattt tatacactt aaaaataaac aattcaggga gtgggtaag cagggccat atgaataaca tgggtgctt cttaaaatg cctaaaggg gaggactca tcaattccat ttaccttct ttctgacta tttttcagaa tctcttctt ttcgaagtg ggtgatagt tggtagattc taatggctt attgcagcga ttaataaacg gcaaaaggaa gcagggttg ttctcttctt tttgttctt catctaaacc tctgtttt atgggtcaga gtcccgactg ccatcttga cttgtcaga aaaaaaaa aaaaaa METPNNTEDY DTTTFDYG ATPCQKNER AFGAQLPPL YSLVFVGLV GNILVVLV P QYKRLNMTS IYLLNLAISD LFLFTLPFW IDYKLDWV FGDAMCKILS GFYTGLYSE IFFIILLTID RYLAIVHAVF ALRARTVTFG VITSIIWAL AILASMPGLY FSKTQWETH HTCSLHPHE SLEWKLFOA LKLNLFGLVL PLLVMICYT GIILKILRRP NEKSKAVRL IFVIMIIFFL FWTPYNLTIL ISVFQDFLFT HECEQSRHLD LAVQVTEVIA YTHCCVNPVI YAFVGERFRK YLRQLFHRV AVHLVWLPF LSVDRLEVS STSPSTGEHE LSAGF	Homo sapiens
63	737	C-C Chemokine Receptor 3	NM_001837	tttttcttct tctatcacag ggagaagtga aatgacaacc tcaatagata cagttgagac A ctttgtacc acatcctact atgatgactg gggcctgctc tgtgaaaaag ctgataccag agcactgat gccagattt tggcccgct gtactccctg gtgttacctg tgggctctt gggcaatgt gtgggtgga tgatcctcat aaaatacagg aggtccgaa ttatgaccaa catctacctg ctcaacctg ccatctcga cctgtcttc ctcgtcacc ttccattctg gaccactat gtcagggggc ataatgggt ttttgccat ggcagtgtga agtccctc agggttttat cacacaggct tgtacagcga gatcttttc ataactctgc tgacaatcga caggtacctg gccattgtcc atgctgtgt tgccttcga gcccggactg tcaatttgg tgtcatcacc agcatcgtca cctggggcct ggcagtgcta gcagctctc ctgaattat cttctatgag actgaagagt tgttgaaga gactcttgc agtgccttt accagagga	Homo sapiens

C-C  
Chemokine  
Receptor 3

NP\_001828.1

737

64

Homosapiens

tacagtatat agctggaggc atttccacac tctgagaatg accatcttct gtctegttct  
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t

NP\_001828.1

738

65

Homosapiens

C-C  
Chemokine  
Receptor 4

NM\_005508

738

65

Homosapiens

gaggggtttt gatctcttc cctctctct tctccctcag tctccacatt caacattgac aagtcattc  
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ctgacacccc cagctcatct tacacgcagt ccacatgga tcatgatctt catgatgctc  
tgtaggaaaa atgaaatggt gaaatgcaga gtcaatgaac ttttccacat tcagagctta  
ctttaaatt ggtattttta ggtgaagat cctgagcca gtgtcaggag gaaggcttac  
accacagtg gaaagacagc tttctatctt gagggcagct ttttctctc cactagacaa

NM\_005508

738

Homosapiens

Homo  
sapiens

NP\_005499.1

C-C  
Chemokine  
Receptor 4

738

66

gtccagcctg gcaagggttc acctgggctg aggcattcctt cctcacacca ggcttgcttg  
caggcatgag tcaagtctgat gagaactctg agcagtgcctt gaatgaagtt gtagtaata  
ttgcaaggca aagactatct ccttctaacc tgaactgatg ggtttctcca gagggaattg  
cagagtactg gctgatggag taaatcgcta ccttttgctg tggcaaatgg gcccccg  
VLPFKYKRL RSMTDVYLLN LAISDLFFVF SLPFWGYAA DQWVFLGLC KMISWYLVG P  
FYSGIFFVML MSIDRYLAIV HAVFSLRART LTYGVITSLA TWSVAVFASL PGFLFSTCYT  
ERNHTYCKTK YSLNSTTWKV LSSLEINILG LVIPLGIMLF CYSMIIRTLQ HCKNEKNKA  
VKMIFAVVVL FLGFWTPYNI VLFLETVEL EVLQDCTFER YLDYAIQATE TLAFFVHCLN  
PIIYFFLGEK FRKYILQLFK TCRGLFVLQ YCGLLIYSA DTPSSSYTQS TMDHDLHDAL

NM\_001838

C-C  
Chemokine  
Receptor 7

741

67

gtgagacagg ggtagtcgca ggcggggcac agccttctctg tgtgggttta cgcgccagag A  
agcgtcatgg acctgggga accaatgaaa agcgtgctgg tgggtgctct ccttgtcatt  
ttccaggtat gctgtgtgca agatgaggtc acggaagatt acatcgga caacacaca  
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tggttcctcc ctatcatgta cctcatcatt tgtttcgtgg gcctactgg caatgggctg  
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gagctcagta agcaactcaa catcgctac gacgtcact acagcctggc ctgcgtccgc  
tgtcgtgcta acctttctt gtagccttc atcgggctca agttccgcaa cgtatctctt  
aagctcttca aggacctggg ctgcctcagc caggagcag tccggcagtg gtcttctctg  
cggcacatcc ggcgctcctc catgagtgtg gaggccgaga ccaccaccac cttctcccca  
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agaggctatt gtccctctaa ccaaaaactg aaagtgaag tccagaaact gttccacact  
gctggagtga aggggccaag gagggtgagt gcaaggggag tgggagtggtc ctgaagagtc  
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cctccaaagcc agcgggaatg gcagtgcca cgcgcctca aaagcacact catccctca  
cttgcgcgct cgccttccca ggctctcaac aggggagagt gtggtgtttc ctgcaggcca

Homo  
sapiens

68	741	C-C Chemokine Receptor 7	NP_001829.1	MDLGKPMKSV LPIMYSIIICF SWVFGVHFCK GIWIIATVLS FCYLVIIITL SKQLNIAIDV IRRSMISVEA TTTTAAATTTA GAAGGTTTCC CACGGTGACT CAGTGATGAT AAAATGATGT CTGGAAGAAG CCCATGGTGA ACATTCGCAG GACTAGAGCA TGCCAAATAT CTGGCACAAAC TGAAGGATTT CATATACCTT ATCATTAATG CTGAATCAAG GTGCCTATAA ctccagagag aggaattggc atggattata ttctcaagcc ttttattgcc gtgggtctgca gaacctgctt tttgggactg atgttttttca gccctaaagg gccattatgg ctacagtgtt aaaatgaaca	LVALLVIFQ VGLLGNGLVV LIFAIYKMSF IPELLYSDLQ LQARNEFRNK TYSLACVRCC ETTTTFSP AAAACTTTTAT AAAAACAAGTT AAAGACACAG GATAAACAAAG CTGACCTCCT TGGATGTTGA AATAGCTGAA AAAAGTGCCT GTGTGTATTC GCTGTTGCCA CTCCAGCCTG TGTATATCAA CAAAATCCAT AGGCTCCAGT CTGATTATGA ATGACACAGT attgagctgc aacactgaaa cacttgacct cctgtgatgc tcctgtttgt agaagctgag ttgtcttctc taatgtgcaa tcacctctca tgaggacgat ctaccatccc attcatttta ttttaggcctt	69	742	C-C Chemokine Receptor 8	AI733823	TGGAATAGCA TAGCATGAAG TTCTGAATGT GTGGTGACTT TATATATGTA AGTTTTTAAC CGGTTCTGAA ACAGATTATA AAAACAGAAC ACACTTAGAA TGCTATGTT GTGAAAAGAA CAATAAGCTG TATTTCATTCA TAATAGTGAT GAAAA actcacatga ctccagaaac cagtgtagaca ggaacttatt attcagttct gagcatcaca cttccccttt agtggtgtct gagtgtagac gagtgtagac caggatggc attgctagtg caatcaacag attgctagtg gttgatccca	AGTGAACAGG GATGCCATAT CCAGCACAAAC GGAAGGAATC AAAAATATAC ATCGAGATG TCAAGAGTGA TGGTGAAAAT AAGAAATCAC CACAAATGACT CAGTGATGAT ATGATATCTG AAAGAAATAG TTGACCAATG GATGAAGATG ggatacacga actccagaa acagtgcacg cagacaaatg ctgggaaaca gatgtatacc cagacctact ggcttttatt aggtatctgg acacgctgt acaaagctgt ttttaccaag tgccctctga tccacctct	70	742	C-C Chemokine Receptor 8	LG6770	TTGTAGCAGC GATGCCATAT CCAGCACAAAC GGAAGGAATC AAAAATATAC ATCGAGATG TCAAGAGTGA TGGTGAAAAT AAGAAATCAC CACAAATGACT CAGTGATGAT ATGATATCTG AAAGAAATAG TTGACCAATG GATGAAGATG ggatacacga actccagaa acagtgcacg cagacctact ggcttttatt aggtatctgg acacgctgt acaaagctgt ttttaccaag tgccctctga tccacctct	71	742	C-C Chemokine Receptor 8	NM_005201	GGATGCAGC GATGCCATAT CCAGCACAAAC GGAAGGAATC AAAAATATAC ATCGAGATG TCAAGAGTGA TGGTGAAAAT AAGAAATCAC CACAAATGACT CAGTGATGAT ATGATATCTG AAAGAAATAG TTGACCAATG GATGAAGATG ggatacacga actccagaa acagtgcacg cagacctact ggcttttatt aggtatctgg acacgctgt acaaagctgt ttttaccaag tgccctctga tccacctct
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72	C-C Chemokine Receptor 8	NP_005192.1	742	<p>atcctgcacc agctgaagag gtgtcaaaac cacaacaaga ccaaggccat caggttggtg  ctcattgtg tcattgcac tttactttt tgggtcccat tcaacgtggt tctttcctc  acttccctgc acagtatga catcttgat gtagtagca taagccaaca gctgacttat  gccaccatg tcacagaaat cattctttt actcactgt gtgtgaaccc tgttatctat  gcttttgtg gggagaagt caagaaacac ctctcagaa tattcagaa agttgcagc  caaatcttca actacctagg aagacaaatg cctaggaga gctgtgaaa gtcacatcc  tgccagcagc actcctccc ttcctccagc gttagactaca tttgtgagg atcaatgaag  actaaata aaaaacatt tctgaatgg catgtagta gcagtgcga aaggtgtggg  tgtgaagggt ttccaaaaa agttcagcat gaaggatgc atatatgtt ttgccaacac  ttaaaacaca atgactggag acatagtgtt gcatgcctgg cacaacatca agcctgtgat  tgtgtttatt gatgatgtt aacaagtgtt aactttaag gattctgtat gccaaagtga  aaaaaagat gtcgcaccc cttcatatgc aaaaatatac cttcagagac tgtcagttag  ctggaagaag tggatatga agtttgaca tcaatgata ggtccagtt gctatgcat  tgactgatg tgaatggct gtagtgattc tgaatcaagg tgattgtgat tatagtaca  atgaagatga tgctattaat actgcataaa aagtgcctgt agatgacatg gtgaaaatat  ttgacaggct tatggaagga ctacagcagc acgcattcat aacagaacaa gaaattatct  cagcttataa aatcaaacag agacttctag acaaaaacca ttgttgata ggcagatgcc  tctagaagag acgtttaaaa gccatcaaac acaatgcctc atcttccctg gaggaacccac  ttcctgatcc ctcaactgtg tctgatgttt ctctcatgt aagaaataaa aataaaaaat  aaaaaaatat atattggtat gtaactacag gaaaaaata aaaaatatat agtgacagt  aacctttcaa tcaaaactca gtatcataag tagagactga aaacttgccg ttattgattg  ttgttattaa cagctgatac aggtattctg ctgagtctac tgcgtccctg ttaccatgaa  cacgtttttt cactattaat ggtgcgtcat attttttact tttaagtact tacgtgtgag  taagtgaag aaaaatgatt ctatcagta gtatcaatga ttactcaat atctgaatca  ccttgattca gaaccatttc agctgtttca ccatcagta atgaataaca gctcattga  tgtcaaaaac ttcaatatcc acttctttca gctactgta gactctgga gtatactttt  tgcatatga aggaagtcag atttttttt</p>	Homo sapiens
73	CXC Chemokine Receptor 3	NM_001504	752	<p>NP_005192.1</p> <p>atcctgcacc agctgaagag gtgtcaaaac cacaacaaga ccaaggccat caggttggtg  ctcattgtg tcattgcac tttactttt tgggtcccat tcaacgtggt tctttcctc  acttccctgc acagtatga catcttgat gtagtagca taagccaaca gctgacttat  gccaccatg tcacagaaat cattctttt actcactgt gtgtgaaccc tgttatctat  gcttttgtg gggagaagt caagaaacac ctctcagaa tattcagaa agttgcagc  caaatcttca actacctagg aagacaaatg cctaggaga gctgtgaaa gtcacatcc  tgccagcagc actcctccc ttcctccagc gttagactaca tttgtgagg atcaatgaag  actaaata aaaaacatt tctgaatgg catgtagta gcagtgcga aaggtgtggg  tgtgaagggt ttccaaaaa agttcagcat gaaggatgc atatatgtt ttgccaacac  ttaaaacaca atgactggag acatagtgtt gcatgcctgg cacaacatca agcctgtgat  tgtgtttatt gatgatgtt aacaagtgtt aactttaag gattctgtat gccaaagtga  aaaaaagat gtcgcaccc cttcatatgc aaaaatatac cttcagagac tgtcagttag  ctggaagaag tggatatga agtttgaca tcaatgata ggtccagtt gctatgcat  tgactgatg tgaatggct gtagtgattc tgaatcaagg tgattgtgat tatagtaca  atgaagatga tgctattaat actgcataaa aagtgcctgt agatgacatg gtgaaaatat  ttgacaggct tatggaagga ctacagcagc acgcattcat aacagaacaa gaaattatct  cagcttataa aatcaaacag agacttctag acaaaaacca ttgttgata ggcagatgcc  tctagaagag acgtttaaaa gccatcaaac acaatgcctc atcttccctg gaggaacccac  ttcctgatcc ctcaactgtg tctgatgttt ctctcatgt aagaaataaa aataaaaaat  aaaaaaatat atattggtat gtaactacag gaaaaaata aaaaatatat agtgacagt  aacctttcaa tcaaaactca gtatcataag tagagactga aaacttgccg ttattgattg  ttgttattaa cagctgatac aggtattctg ctgagtctac tgcgtccctg ttaccatgaa  cacgtttttt cactattaat ggtgcgtcat attttttact tttaagtact tacgtgtgag  taagtgaag aaaaatgatt ctatcagta gtatcaatga ttactcaat atctgaatca  ccttgattca gaaccatttc agctgtttca ccatcagta atgaataaca gctcattga  tgtcaaaaac ttcaatatcc acttctttca gctactgta gactctgga gtatactttt  tgcatatga aggaagtcag atttttttt</p>	Homo sapiens

74	CXC Chemokine Receptor 3	NP_001495.1	<p>gagccctct gctggcctgc atcagctttg accgtacct gaacatagtt catgccaccc  agctctacc cggggggccc cggggccg cggccctcac ctgctggct gtctgggggc  tctgctgct tttgccttc ccagacttca tcttctgtc ggccaccac gagagcgcc  tcaacgccac ccactgcaa tacaacttc cacagggtgg cgcacggct ctgcggtgc  tgacgtggt gctggtttt ctgctgccc tgcgtactat ggctactgc tatgccaca  tctggcgt gctgctggt tccaggggcc agcggtgct cggggccatg cggctggtgg  tggtggtgt ggtggcctt gccctctgt gacccccca tcacctggtg gtgctggtgg  acatcctcat ggacctggc gctttggccc gaaactggt ccgagaaagc aggttagacg  tggccaagt ggtcacctca ggcctgggt acatgactg ctgctcaac cgtgtgctct  atgctttgt aggggtcaag ttccgggagc ggatgtgat gctgctcttg cgtctgggt  gccccacca gagaggctc cagaggcagc catgctctc cgcgcggat tcactctggt  ctgagacctc agaggctcc tactcgggt tgtgaggcg gaatccgggc tccctttcg  ccacagtct gacttcccg cactccaggc tctccctcc cctgcccgc tctggtctc  cccaatatc tgcctccgg gactcactg cagccaggc accaccagt ctccgggaa  gccacctcc cagctctgag gactgcacca ttgctgctcc ttagctgcca agccccatc  tgccgccga ggtggtgctc tgagcccca ctgctctct catttgaaa ctaaaacttc  atctcccca agtgcgggga gtacaaggc tggcgtgag ggtgctgcc catgaagcca  cagccaggc ctccagctca gcagtactg tggcctggt cccaagacc tctatattg  ctcttttatt ttatgtcta aaatcctgt taaaacttt caataaaca gatcgtcagg</p>	Homo sapiens
75	CXC Chemokine Receptor 4	NM_003467	<p>gtttgttggc tgcggcagca ggtagcaaa ggcctgagtg ctccagtagc A  cacgcatct ggagaaaccag cggttaccat ggaggggatc agtatataa cttcagataa  ctacaccgag gaaatggct caggggacta tgactccatg aaggaacct gtttccgtga  agaaaatgct aatttcaata aaatcttct gccaccatc tactccatca tcttcttaac  tggcatttg ggcaatggat tggctatctt ggtcattggt taccagaaga aactgagaag  catgacggac aagtacaggc tgcacctgtc agtggccgac ctctctttg tcatcacgt  tcccttctgg gcagttgat cgtggcaaa ctggtacttt gggaaacttc tatgcaaggc  agtccatgct atctacacag tcaacctcta cagcagtgc ctcatcctg ccttcatcag  tctggaccgc taccctggcca tctgcccgc caccacagt cagaggccaa ggaagctgtt  ggctgaaaag gtggtctatg ttggcgtctg gatccctgcc ctctctgta ctatcccg  cttcatcttt gccaacgtca gtgaggcaga tgacagatat atctgtgacc gcttctacc  caatgacttg tgggtggttg tgttccagtt tcagcacatc atggttgccc ttatcctgcc  tggtattgtc atcctgctct gctattgcat tatcatctc aagctgtcac actccaagg  ccaccagaag cgaaggccc tcaagaccac agtcatctc atcctggtt tcttcgctg</p>	Homo sapiens

Homo  
sapiens

P

NP\_003458.1

CXC

753

76

Chemokine  
Receptor 4

ttggctgct tactacattg ggatcagcat cgactccttc atcctcctgg aaatcatcaa  
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ttttcctgtt cttaagacgt gatttgcgtg tagaagatgg cacttataac caagcccaa  
agtggtatag aaatgctggt ttttcagttt tcaggatggg gttgatttca gcactacag  
tgtacagtct tgtattaagt tgttaataaa agtatcatgt aaacttactt agtgttatg  
MEGISIYTS NYTEEMSGD YDSMKPCFR EENANFNKIF LPTIYSIIFL TGIVNGGLVI  
LVMGYQKKLR SMTDKYRLHL SVADLLFVIT LPFWAVDAVA NWYFGNFLCK AVHVIYTNL  
YSSVLILAFI SLDRYLAIVH ATNSQRPRL LAEKVVYGV WIPALLITIP DFIFANVSEA  
DDRYICDRFY PNDLWVWFQ FQHIMVGLIL PGIVILSCYC IISKLSHSK GHQKRKALKT  
TVILILAFEA CWLPYYIGIS IDSFLLEII KQCEFEFNTV HKWISITEAL AFFHCCINPI  
LYAFILGAKFK TSAQHALTSV SRGSSLKILS KGRGGHSSV STESESSFH SS  
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ttccaatgc aaaggggcgc cttcgccaag tctcagagca aaacctttcg agtggcctg  
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ttgcttactg accagaaac tcccttgggg aaaactctga tgtcctggga tcatgtatgc

NM\_004054

Complement

755

77

Component 3a  
Receptor 1

Homo  
sapiens

A

78	755	Complement Component 3a Receptor 1	NP_004045.1	<p> attgctctag catctgcaa tagttgcttt aatcccttcc tttatgcctt cttggggaaa  gatttagga agaaagcaag gcagtccatt cagggaaattc tggaggcagc cttcagtgag  gagctcacac gttccacca ctgtccctca acaaatgtca tttcagaaa aatatgtaca  actgtgtga  TDLLSQPWNE PPVILSMVIL SLTFLGLGPG NGLVLWVAGL KMQRIVNTIWI P  FLHLTLADLL CCLSLPFLSLA HLAIQGGQWPY GRFLCKLIPS IIVLNMFAV FLTAISLDR  CLVVFKEPWC QNHRNVGMAC SICGIIWVA FMCIPVFVY REIFTTDNHN RCGYKFGGLSS  SLDYPDFYGD PLENRSLENI VQPPGEMNDR LDPSSFQND HPWTVPTVFQ PQTFQRPASAD  SLPRGSARLT SQNLYSNVEK PADVVPKIP SGFPIEDHET SPLDNSDAFL STHLKLFPESA  SSNSFESEEL PQGFQDYINL GQFTDDQVP TPLVAITIR IIVGFLLPV IMIACYSFIV  FRMQRGREFAK SQSKTRFVAV VVAVFLVCM TPYHIFGLS LLTDPETPLG KTLMSWDHVC  IALASANSCE NPFLYALLGK DFRKKARQSI QGILEAAFESE ELTRSTHCPS NNVISERNST  TV </p>	Homo sapiens
79	758	Complement Component 5a Receptor 1	NM_001736	<p> agggggagcc caggagacca gaacatgaac tccttcaatt ataccacccc tgattatggg A  cactatgatg acaaggatac cctggacctc aacacccctg tggataaaac tttaaacacg  ctgcgtgttc cagacatcct ggccttggtc atctttgag tctgtcttcc ggtgggagtg  ctgggcaatg ccttggtggt ctgggtgacg gcattcgagg ccaagcggac catcaatgcc  atctgggtcc tcaacttggc ggtagccgac ttcctctcct gcctggcgt gccatcttgg  tccactgcca ttgtacagca tcaccactgg ccttttggcg gggccgctg cagcatcctg  cctccctca tctgtctcaa catgtacgcc agctggccac tctgggccac catcagcgcc  gaccgcttcc tgcgtggttt taaacccatc tgggtgccaga acttccgagg ggcggcgctg  gcctggatcg cctgtgccc ggttggggt ttagccctgc tgcctgacct accctccttc  ctgtaccggg tggctccgga ggagtacttt ccaccaagg tgtgtgtgg cgtggactac  agccacgaca aacggcgga ggcagccgtg gccatgctcc ggctgttcc gggcttccctg  tggcctctac tcacgctcac gattgttac actttcacc tgcctcggac gttggagccgc  agggccacgc ggtccacca gacactcaag gtggtggtgg cagtgtggtc cagtctctt  atcttctggt tgcctacca ggtgacggg ataagtgt tcttccctga gccatcgtca  ccaccttcc tgcgtctgaa taagctggac tccctgtgtg tctcctttgc ctacatcaac  tgcgtcatca acccatcat ctacgtggtg gccggccagg gcttccagg cgcactgagg  aatccctcc ccagcctcct ccggaacgtg ttgactgaag agtccgtggt tagggagagc  aagtcattca cgcgtccac agtggacact atggccaga agaccaggc agttaggagc  acagcctcat gggccactgt gggccgatgt ccccttccct cccggccatt cctcctctg  ttttcacttc acttttctg ggtggtgtgt accctagcta actaaacttc cctcatgttg  cctgtcttc ccagactgt cctcctttt ccagcgggac tcttctcat cctcctcat  tgcaagggtga acacttctt ctaggagga ccttccacc cccaccccc cccacacac  catctttcca tccaggctt ttgaaaaaca aacagaacc cgtgtatctg gatatattcc  atatggcaat aggtgtgaac agggaaactca gaataatgt aactggaatc tcaaaagtct  aaaaaatgt attatttta tggcaagtgt gaaaatgt aactggaatc tcaaaagtct  tttgggacaa aacagaagtc catggagtta tctaagctct tgaagttag ttaatttaa  aaagaaaatt aggtgagag cagtggctca cgcctgtaat cccagaactt tgggaggcta  aggtgggtgg atcacctgag gtcaagagtt ccagaccagg ctggccagca tggtagaaac </p>	Homo sapiens

80	758	Complement Component 5a Receptor 1	NP_001727.1	<p> cgtctgtac taaaaatatac aaaaaattaac tgggcatggt agtgggtgccc tgaatcccc  gctacttggg aggtgaggt gggagaattg ctcgaacctt ggagtgagg gttgtggtga  gccatgatcg caccactgca ctctagcctg ggtgaccgag ggaggtctctg tctcaaaagc  aaagcaaaaa caaaacaaa aacactaaa aacactgag tttgtttgt actttgtttt  taaatatgc tttctattt gagatcattg caaactcaac aaattgttaa gtaatgatac  agagggatct tgtgtacct tcaaccagcc tcccccaatg gcaacatctt gcaaaactac  aatgtagtct cataaccagg atattgacat tgatacagtg aagatacagg acattctcat  caccacagg atccccagga tggccacttc cctccaccoc cacacccag cgtgtccct  aacccctggc aaccaggaat ccaactctcca tttctataat gttgtcattt caagaatgtt  attcaatgga atcatatagt atgtaacctg ttttgagctt aaaaaaaa gtatacatga  ctttaatgag gaaaaataaa atgaatattg aaaaaaaa ctttagag  MNSENYTPD YGHYDDKDTL DLTTPVDKTS NTLRPVDILA LVIFAVFLV GVLGNALVW P  VTAFEAARTI NAIWFLNLAV ADFLSCLALP ILFTSIVQHH HWPFGGAACS ILPSLILNM  YASILLIATI SADRFLLVFK PIWCQNFRA GLAWIACAVA WGLALLITIP SFLYRVVREE  YFPPKVLGV DYSHDKRRER AVAIVRLVLG FLWPLLLTI CYTFILLRTW SRRATRSTKT  LKVVAVVVAS FFIFWLPYQV TGIMMSFLEP SSPTFLLNK LDSLCVSFAY INCCINPIIY  VWAGQGFQGR LRKSLPSLLR NVLTEESVVR ESKSFTRSTV DTMAQKTQAV </p>	Homo sapiens
81	767	Calcitonin Receptor-like Receptor	NM_005795	<p> gcacgagga acaaccttc tctctscagc agagagtgc acctcctgct ttaggacctat A  caagctctgc taactgaatc tcatctaat tgccagatca cattgcaaa gtttccactct  ttcccacctt gcttgggtt aaatctcttc tgcggatct cagaaagtaa agttccatcc  tgagaatatt tcacaaagaa tttctttaa agctggactg ggtcttgacc cctggaaattt  aagaaattct taaagacaat gtcaaatatg atccaagaga aaatgtgatt tgagtctgga  gacaattgtg catatcgtct aataataaaa acccatacta gcctatagaa acaaatattt  gaataataaa aaccatact agcctataga aaacaatatt tgaagattg ctaccactaa  aaagaaaact actacaactt gacaagactg ctgcaaaact caattggtea ccacaacttg  acaagggtgc tataaaacaa gattgctaca acttctagtt tatgttatac agcatatttc  atttggctt aatgatggag aaaaagtga cctgtattt tctggttctc ttgctttttt  ttactagaaa taaaatcatg acagctcaat atgaatgta ggaactcaatt cagttgggag  ccattcaaca agcagaaggc gtttactgca acagaacctg ggtggatgg ctctgctgga  acgatgtgc agcaggaact gaatcaatgc agctctgccc tgattacttt caggactttg  atccatcaga aaaagttaca agatctgtg accaagatgg aaactggttt agacatccag  caagcaacag aacatggaca aattataccc agtgaatgt taacacccc gagaaagtga  agactgcact aaattgttt tacctgacca taattggaca cggattgtct attgcatcac  tgcttatctc gcttggcata tttttttt tcaagacctt aagttgcca aggattacct  tacacaaaa tctgttcttc tcattgttt gtaactctgt tgaacaatc attcacctca  ctcgaatggc caacaaccag gcttagtag ccacaaatcc tgttagttgc aaagtgtccc  agttcattca tctttacctg atgggctgta attactttt gatgctctg gaaggcattt  acctacacac actcattgtg gtggccgtgt ttgcagagaa caacattta atgtggtatt  atctcttgg ctggggattt ccaatgattc ctgctgtat acatgccatt gctagaagct  tatattacaa tgacaattgc tggatcagtt ctgataccca tctctctac attatccatg </p>	Homo sapiens

82	767	Calcitonin Receptor- like Receptor	NP_005786.1	gccccaatgtg tgctgcttta ctggtgaatc tttttttctt gttaaatatt gtacgcgttc tcatcaccaa gttaaaaagt acacaccaag cggaaatccaa tctgtacatg aaagctgtga gagctactct tatcttggtg ccattgcttg gcattgaatt tgtgctgatt ccatggcgac ctgaaggaaa gattgcagag gaggtatatg actacatcat gcacatcctt atgcacttcc agggtctttt ggtctctacc atttctgct ttgtaatgg agaggttcaa gcaattctga gaagaaaactg gaatcaatc aaaatccaat ttggaacacg cttttccaac tcagaagctc ttcgtagtgc gtcttacaca gtgtcaacaa tcagtgatgg tccaggttat agtcagatgc gtcctagtga acacttaaat ggaataagca tccatgatat tgaaaaatgtt ctcttaaaac cagaaaattt atataattga aaatagaagg atggtgtctt cactgtttgg tgcctctctt aactcaagga cttggaccca tgactctgta gccagaagac ttcaatatta aatgactttg gggaatgtca taaagaagag ccttcacatg aaattagtag tgtgttgata agagtgtaac atccagctct atgtgggaaa aaagaaatcc tggtttgtaa tgtttgtcag taaatactcc cactatgctt gatgtgacgc tactaacctg acatcaccaa gtgtggaatt ggagaaaagc acaaatcaact tttctgagct ggtgtaagcc agttccagca caccattgat gaattcaaac aaatggctgt aaaactaaac atacatgltg ggcattgatt tacccttatt cscoccaaag gacctagcta aggtctataa acatgaaggg aaaattagct tttagtttta aaactcttta tcccatcttg atgtgggcag ttgacttttt tttttccca gagtgccgta gtcctttttg taactacct ctcaaatgga caataccaga agtgaattat cccgtctggc tttcttttct ctatgaaaag caactgagta caattgttat gatctactca tttgctgaca catcagttat atcttctggc atatccattg tggaaactgg atgaacagga tgtataatat gcaatcttac ttctataca ttaggaaaac atcttagttg atgctacaaa acacctgtgc aacctcttcc tctactgata aacagtggga gggaaattctt agctgtaaat ataaaatttg ccttccatt atttctctgg aattttgtaa aaagaaattg tgaaaaatga gcttgtaaat actccattat tttattttat agtctcaaat caaatacata caacctatgt aatttttaa gcaatatat aatgcaacaa tgtgtgtatg ttaatatctg atactgtatc tgggctgatt ttttaataa aatagagctt ggaatgct	Homo sapiens
83	832	Cannabinoid Receptor 1	NM_001840	MEKKCTLYFL VLLPFFMILV TAELESPED SIQLGVTRNK IMTAQYECYQ KIMQDPIQQA P EGVYCNRTWD GWLCWNDVAA GTESMQLCPD YFQDFDPEK VTKICDQDGN WFRHPASNRT WTNYTQCWNV THEKVKTNL LFYLTIIHGHS LSIALSLISL GIFFYFKSL S QQRITLHKNL FFSFVCNSWV TIIHLTAVAN NQALVATNPV SKVSVQFIHL YLMGCNYFWM LCEGIYLIHTL IVVAVFAEKQ HLMWYIFLGW GFPLIPACIH AIARSLYND NCWISSDTHL LYIHPICA ALLVNLFFLL NIVRVLITKL KVTHQAESNL YMKAVRATLI LVPLLGIEFV LIPWRPEGKI AEVYDYIMH ILMHFQGLLV STIFCFNGE VQAILRRWN QYKIQFGNSF SNSEALRSAS YTVSTISDGP GYSHDCPSEH LNKSIHDIE NVLLKPENLY N ggggactacg gagagctctg caggagcgg agggcccccgc cggggccaa gtagcttctg A tcccaggac caggggatgc gaaggatg cccctgtgg gtcactttct cagtcatttt gagctcagcc taatcaaga ctgaggttat gaagtcgac tcagatggcc ttgcagatac cacctccgc accatcaca ctgacctctt gtacgtgggc tcaaatgaca ttcagtagca agacatcaaa ggtgacatgg catccaaatt aggttacttc ccacagaaat tccctttaac ttcctttagg ggaagtccct tccaagagaa gatgactgcg ggagacaacc ccagctagt	Homo sapiens

84	832	Cannabinoid Receptor 1	NP_001831.1	<p> cagcagagac caggtgaaca ttacagaatt ttacaacaag tctctctcgt ccttcaagga  gaatgaggag aacatccagt gtggggagaa cttcatggac atagagtgtt tcatggtcct  gaacccacgc cagcagctgg ccattgcagt cctgtccctc agctgggca ccttcaaggt  ctcctggaac ttcctggtgc tctgtgcat cctccactcc cgcagcctcc gctcagggcc  ttcatgaccac ttcatcgga cctgggctgt ggcagacctc ctggggagtg tcatcttctgt  ctacagcttc attgacttcc acgtgttcca cgcgaagat agccgcaacg tgtttctgtt  caaaactgggt ggggtcacgg cctccttcac tgcctccgtg ggcagcctgt tctcaccagc  catcgacagg tacatatcca ttacacaggcc cctggcctat aagaggattg tcaccaggcc  caaggccgtg gtggcgtttt gctgattgtg gaccatagcc attgtgatcg ccgtgctgcc  tctcctgggc tggaaactgc agaaactgca atctgtttgc tcagacattt tccacacat  tgatgaaacc tacctgatgt tctggatcgg ggtcaccagg gtactgcttc tgttcatcgt  gtatgcgtac atgtatatcc tctggaaggc tcacagccac gccgtccgca tgattcagcg  tggcaccag aagagcatca tcatccacac gtctgaggt ggaaggtac aggtgacccg  gccagaccac gccgcgatgg acattaggtt agccaagacc ctggtcctga tctgtgtggt  gttgatcacc tctgtggggc cctgtcttgc aatcatgttg tatgatgtct ttgggaagat  gaacaagctc attaagacgg tgtttgcatt ctgcagtagt cctgtcctgc tgaactccac  cgtgaacccc atcatctatg cctgaggag taaggacctg cgacacgctt tccggagcat  gtttccctct tgtgaaggca ctgcgagcc cctggatac agcatggggg actcgagctg  cctgcacaaa cagcaaaa atgcagccag tgttcacagg gccgcagaaa gctgcacaa  gagcacgtc aagattgcca agttaaccat gtctgtgtcc acagacacgt ctgcccaggc  tctgtgagcc tgatgcctcc ctggcagcac aggaagaaagaa ttttttttt taagctcaaa  atctagaaga gtctattgtc tcttattgta ttttttttta actttaccat gctcaatgaa  aagtgattg ccacatgtca cttattgtct tagtttccgt ttgggctaact ctccgggggt  tcgtaggaaa ccttt </p>	Homo sapiens
85	833	Cannabinoid Receptor 2	NM_001841	<p> caggtcctgg gagaggacag aaaaactg gactcctcag cccccggcag ctcccagtcg A  ccagccacc ccaacacac ccaagcctt ctagacaagc tcagtggaaat ctgaagggcc  caccctatgg aggaatgctg ggtgacagag atagccaatg gctccaaagga tggcttggat  tccaaacctt tgaaggatta catgatcctg agtggctccc agaagacagc tgtgctgtg  tctgcaactc tctgggacct gctaaagtgc ttggtggaacg tggctgtgct ctatctgac  ctgtcctccc accaactccg ccggaagccc tcatactgt tcatggcag ctgggctggg  gctgacttcc tggccagtgt ggtctttgca tgcagctttg tgaatttcca tgttttccat  gggtggatt ccaaggctgt cttcctgctg aagattgga cgtgactat gactttcaca  gcctctgtgg gtagcctcct gctgaccgcc attgaccgat acctctgctt gcgctatcca </p>	Homo sapiens

86	833	Cannabinoid Receptor 2	NP_001832.1	MEECWTEIA NGSKDGLDSN PMKDYMLISG POKTAVAVLC TLLGLLSALE NVAVLVILIS P SHQLRRKPSY LFIGSLAGAD FLASVFEACS FVNFHFHGV DSKAVFLLKI GSVMTFTTAS VGSLLLTALD RYLCRLRPPS YKALLTRGRA LVTLGIMWVL SALVSYLPLM GWTCPPRPCS ELFPLIPNDY LLSWLLFI AF LFSGLIITYG HVLWKAHQHV ASLSGHQDRQ VPGMARWRLD VRLAKTLGLV LAVLLICWFP VLALMAHSLA TTLSDQVKKK FAFCSMLCLI NSMVNPVIYA LRSGEIRSSA HHCLAHWKKC VRGLGSEAKE EAPRSSVTET EADGKITPWP DSRDLDSLDC	Homo sapiens
87	922	Leukocyte Antigen CD97	NM_001784	agcctgtgga gacgggacag cctgtgtcca ctcactctt cccctgccgc tccctgccgc A agctccaacc atgggaggcc gctgttttct cgcattctgt gctgtgtgta cctgtgccgg agctgaaacc caggactcca ggggtgtgtc ccggtgtgtc cctcagaact cctcgtgtgt caatgccacc gctgtcgtc gcaatccagg gttcagctct ttttctgaga tcatcaccac cccgacggag actgtgtgac acatcaacga gtgtgcaaca ccgctgaaaag tgcctgtcgg aaaattctcg gactgtgga acacagaggg gagctacgac tgcgtgtgca gcccgggata tgagcctgtt tctggggcaa aaacattcaa gaatgagagc gagaacacct gtcaagatgt ggacgagtgc agctccgggc agcatcagtg tgacagctcc accgtctgct tcaacacctg gggttcatac agctgccgct gccgccagg cttggaagccc agacacggaa tcccgaataa ccaaaaggac actgtctgtg aagatatgac ttttccacc tggaccccg cccctggagt ccacagccag acgctttccc gattcttga caaagtccag gactgggca gagactccaa gacaagctca gccgaggtca ccatccagaa tgtcatcaaa ttggtggatg aactgatgga agctcctgga gacgtagagg cctggcgcc accgtgtccg cacctcatag ccaccagct gctctcaac ctggaagata tcatgaggat cctggccaag agcctgccta aagggccctt	Homo sapiens



caccatacatt tcccccttgcg aacacagagct gaccctgatg atccaggagc ggggggacaa  
 gaacgtcact atgggtcaga gcagcgcaag catgaagctg aattgggctg tggcagctgg  
 agccgaggat ccaggccccg ccgtggcggg catcctctcc atccagaaca tgacgacatt  
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 gctgcccac tacagcaagg gctacggcg cccagatac tgcgtgttg acttgagca  
 gggcttctc tggagcttct tgggacctgt gacctcact attttgtca atgctgtcat  
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 gctccacctt gtgaccagg gtggggacag gggctggccc agggctgcaa tgcagcatgt  
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 ggctcacgggt acagaggcct gccctgctg gccgggcaag aggttctcac tgttgtgaag  
 gttgtagacg ttgtgtaagt tgttttctc tgttaaaatt tttcagtgtt gacacttaaa  
 attaaacaca tgatacaga aaaaaaaaaa a  
 TGGRVFLAFC VMLTLPAGT QDSRGCARWC PQNSSCVNAT ACRCNPGFSS FSEIITPTE P  
 TCDDINECAT PSKVSCGKFS DCWNTEGSYD CVCSPPGEPV SVCKTFKNES ENTQDVDEC  
 SSGQHQCDS TVCENTGVSY SCRCPGWKP RHGIPNNQKD TVCEDMTFST WTPPGVHSQ  
 TLSRFFDKVQ DLGRDSKTS AEVTIQNVIK LVDELMEAPG DVEALAPPVR HLIATQLLSN  
 LEDIMRIIAK SLPKGPFTYI SPSNTELTLM IQERGDKNVT MGQSSARMKL NWAAGAED  
 PGPAVAGILS IQNMTTLLAN ASLNLSKKQ AELEEIVSS IRGVQLRRLS AVNSIFLSHN

Homo  
sapiens

P

NP\_001775.1

Leukocyte  
Antigen CD97

922

88

NTKELNSPIL FAFSHLESSD GEAGRDPPAK DVMPGPRQEL LCAFWKSDSD RGGHWATEVC QVLGSKNGST TCQCSHLSSF TILMAHYDVE DWKLTLLITRV GLALSFLCLL LCILTFLLVR PIQGSRTTIH LHLICICLFVG STIFLAGIEN EGGQVGLRCR LVAGLLHYCF LA AFCWMSLE GLELYFLVVR VFQGGGLSTR WLCILIGYGP LLIVGVSAAI YSKGYRPRY CWLDFEQGFL WSFLGPVTFI ILCNAVIFVT TWKLTQKFS ELPDMMKLLK KARALTITAI AQLFLGCTW VFGLFIFDDR SILVTYVFTI LNCLOGAFLY LLHCLLNKKV REEYRWACL VAGGSXYSEF TSTTSGTGHN QTRALRASES GI	941	EMR1 Hormone NM_001974 Receptor	Homo sapiens
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941	EMR1 Hormone NP_001965.1 Receptor	<p> tgcggggtt cctgcactac cttttccttg cctgtcttctt ctggatgctg gtggaggtg  tgatactgtt cttgatggtc agaaactga aggtggtgaa ttacttcagc tctcgcaaca  tcaagatgct gcacatctgt gccttgggtt atgggtgctg gatgctggtg gtggtgatct  ctgccagtgt gcagccacag ggctatgaa tgataatcg ctgctggctg aatacagaga  cagggttcat ctggagtctt ttggggccag ttgcacagt tatagtatc aactcccttc  tctgacctg gacctgtggt atcttgaggc agaggcttc cagtgttaat gccgaagtct  caacgctaaa agacaccagg ttactgacct tcaaggcctt tgcccagctc ttcatcctgg  gctgctcctg ggtgctgggc atttttcaga ttggacctgt ggaggtgtc atggcttacc  tgttaccat catcaacagc ctgcaggggg ccttcattct cctcatccac tgtctgctca  acggccaggt acgagaagaa tacaagaggt ggatcactgg gaagacgaag ccagctccc  agtcccagac ctcaaggatc ttgctgtcct ccatgccatc cgcttccaag acgggttaaa  gccttctctg ctttcaata tgctatggag ccacagtga ggacagtgt ttctgcagg  agctaccct gaaatctctt ctacagctta catggaatg aggtatccac cagccccaga  acctctggg gaagaatgtt gggggcgtc ttctgtggt tgtatgact gatgagaaat  cagacgttct tgctccaaac gacctttta tcttctgct ctgcaacttc ttcaattcca  gagttctga gaacagaccc aaattcaatg gcatgaccaa gaacacctgg ctaccattt  gtttctctc gccctgtgtg gtgcattgtt ctaagcgtgc cctccagcg cctatcatac  gcctgacaca gagaacctct caataaatga tttgtcgtc gtctgactga ttacccttaa  aaaaaaaaa aaaaaaaaaa  MRGNLLLFW GCCVMHSEW HIRPRKPN KGNCRDSTL CPAYATCTNT VDSYYCTCKQ P  GFLSSNGQH FKDPGVRCKD IDECSQSPQ CGPNSSCKNL SGRYKCSCLD GFSSPTGNDW  VPGKPGNFN TDINECLTSR VCPHSQDCVN SMGSYSCSCQ VGFISRNSTC EDVNECADPR  ACPEHATCNN TVGNYSFCFN PGFESSGHL SCQGLKASCE DIDECTEMCP INSTCNTTPG  SYFCTCHPGF APSSGQLNFT DQGVCRDID ECRQDFSTCG PNSICTNALG SYSCGCIYGF  HPNPEGSKD GNFSQQRVLF KCKEDVIPDN KQIQCCQEGT AVKPAYVFC AQINNI FSVL  DKVCENKTV VSLKNTESEF VPVLKQISMW TKFTKEETSS LATVFLESVE SMTLASEWKP  SANVTPAVRA EYLDIESKVI NKECSEENV TLDLVAKGDKM KIGCSTIEES ESTETTGVAF  VSFVGMESVL NERFFQDHQA PLTTSEIKLK MNSRVVGGIM TGEKKDGFSD PIITYLENVQ  PKQKFERPIC VSWSTDVKGK RWTSEGCVL EASETYTICS CNQMANLAVI MASGELTMDF  SLYIIISHVGI IISLVCLVLA IATFLLCRSI RNHNTYLHLH LCVCLLLAKT LFLAGLHKTD  NKTGCAIITAG FLHYLFACF FWMLEAVIL FLVVRNLKV NYFSSRNIMK LHICAFGYGL  PMLVVVISAS VQPGYGMHN RCWLNTETGF IWSFLGPVCT VIVINSLLT WTLWILRQRL  SSVNAEVSTL KDTRLITFKA FAQLFILGCS WVLGIFQIGP VAGVMAYLFT IINSLOGAFI  FLIHCLLNGQ VREEYKRWIT GKTKPSSQSQ TSRILLSSMP SASKTG  ggaacacgac acctagaagt agagtgaga ttcgctgaag,ttcccttctg aggaagaccc A  acccctccgc ctggagagcc gggctggcg gtccctgagg acccttctcg cctggacagc  ccacggggc ttggggggcc tgcctctgcc ctcatgggc ggcctcgggt tcccgaggcg  gcagtgaaa attcaaatgg ccagtggggg gcgcactcgg aagtggccgc ccgcgatgag  gcagttcagc gggcccgaga gtccggggag ggaggtttat tctccgcctg cagcagatgt  tgaatccgc aacctagagc aggagaggcg gccctggtgg ggaagaggcc accaatctt  ggacggcagg taccagaga gtgagcagct ccacgggga ctgtgcagg tggccgacac </p>	Homo sapiens
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Homo

P

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NP\_001496.1

G Protein-

965

92

93	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000730	LSCLYTIFLF PIGFVGNILI LVMNISFREK MTIPDLYFIN LAVADLILVA DSLIEVFNH	sapiens
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105	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000721.1	agggtgatcc gcatgctcat cgtcatcgtg gtctcttctt tctgtgtgtg gatgcccac	
					ttcagcgcca acgctggtcg ggctacgac accgctcccg cagagcgccg cctctcagga	
106	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000721.1	accccatctt ccttcatcct cctcctgtcc tacacctcct cctgctgcaa ccccatcatc	
					tactgcttca tgaacaaacg cttccgctcc ggcttcattg ccacctccc ctgctgcccc	
107	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000721.1	aatcctggtc cccagggggt gaggggagag gtgggggagg aggaggaagg cgggaccaca	
					ggagcctctc tgtccagggt ctctacagc catatgagt cctcgggtcc acccagtgga	
108	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000721.1	gatgtccctc gaccctccac cgcagaagga aggcaggagg gaggcagaga agaaagaacg	
					gaagaagaga tcaggaagag aaggagcaga gcagagctga tggagaagga aggtcccatc	
109	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000721.1	tccagtggga actcttcaag gtctcttttc atcttctc atcttctc gcactgctcc	
					agtggggcca tgattggttt ctaggcagtt caaagcagga tatgttaagt aacactcaac	
110	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000721.1	catcag	
					MDVVDLLVN GSNITPPCEL GLENETLFLC DQPRSKEMQ PAVQILLYSL IFLLSVLGNT P	Homo
111	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000721.1	LVITVLIRNK RMRVTNIFL LSLAVSDML CLFCMPNLI PNLLKDFIFG SAVCKTTYF	sapiens
					MGTSVSVSTF NLVAISLRY GAICKPLQSR VWQTKSHALK VIAATWCLSF TIMTPYPIYS	
112	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000721.1	NLVPFTKNNN QTANMCRFL PNDVMQSWH TFLLLIFLI PGIVMWAYG LISLELYQGI	
					KFEASQKKA KERKPTSS KYEDSDGKY LQKTRPPKRL ELRQLSTGSS SRANRIRNS	
113	978	Coupled Receptor GPR30	Cholecystoki nin A Receptor	NM_000721.1	SAANLMAKR VIRMLIVIV LFFLCWPIF SANAWRAYDT ASERRLSGT PISFILLLSY	

95	1103	Corticotropin releasing factor Receptor 2	TSSCVNPIIY CFMNRRLG FMATFPCCPN PGPPGARGEV GEEEGGTTG ASLSRFSYSH MSASVPPQ	atggacgagg cactgtcca gactgtgtg gaggccaact gcagcctggc gctggctgaa A gagctgctt tggacgggtg ggggccaacc ctggaccccg agggctcccta ctctactgc aacacgacct tggaccagt cggaacgtgc tggccccgca gcgtgcggg agccctcgtg gagaggcgt gcccgagta ctccaacggc gtcaagtaca acacgaccc gaatgcctat cgagaatgct tggagaatgg gacgtgggccc tcaaatgata actactaca gtgtgagccc atthtggatg acaagcagag gaagatgac ctgcactacc gcacgcccct tgttgtcaac tacctggccc actgcgtatc tgtggcagcc ctgggtggccg ccttctgct tttctggcc ctgcggagca ttcgtgtct gcggaatgtg attcaactgga acctcatcac cactttatc ctgcgaaatg tcatgtggtt cctgtgtcag ctctgtgacc atgaagtga cgagagcaat gaggtctggt gccactgcat caccaccatc tcaactact tctgtgtgac caacttcttc tggatgtttg tggaaaggctg ctacctgcac acggccattg tcatgacctc tccactgag cgctgcgca agtgcctctt cctcttcac ggatggtgca tccccctccc catcatgctc gcctgggcca tcggcaagct ctactatgag aatgaacagt gctgggtttgg caaggagcct ggcgacctgg tggactacat ctaccaaggc cccatcttc tctgtctctt gatcaatttc gtatttctgt tcaacatcgt caggatccta atgacaaagt tacgcgcgtc caccacatcc gagacaatcc agtacaggaa ggcagtgaag gccacccctgg tgctcctgccc cctcctgggc atcacctaca tgccttctt cgtcaatccc ggggaggagc acctgtcaca gatcatgttc atctatttca actccttctt cagtcgttctt caggggttct tctgtctgtt ctctactgc ttcttcaatg gagaggtgct ctcagccgtg aggaagagt ggcacccgtg gcaggacctc cactcccttc gactcccat ggcggggccc atgtccatcc ctacatcac cacacggatc agcttcaca gcatcaagca gacggcgtt gtgtgacccc tcggctgccc acctgcacag ctccccctgc ctctccacc ttcttctctt ggggttctctg tctgtggcag gctctcgtgg ggcaggagat gggaggggag agaccagctc tccagcctgg caggaaagag ggggtgcggc agccaaaggg gactgcaagg gacagggatg agtgggggccc accaggctca gcgcaagagg aagcagaggg aattcacagg acccctgag aagagccagt cagatgtctg caggcattg cccatccag cctctctggc cagggcctta ctgggcccag agcagagaag gacctgtcca acacacacag ctatttatag tagcacac agggctcccc tgcctactc atggagccag cagccaggca atggtgtggc cctgcactgg ccttggact ccacactcag tgggtccctg cagttgggtg ggttaacgcc aagcaaggga tcagtgtggc tgccttatcc cagggtgtc acctagagag gctcacttgt acccaacctt gttcctgtgt cccctcccca gccatcctcc ccgcttgggg ggtcccatga aggatgcagg ctccaggcc tggcttctct tcttgggaga ccccctctct ccctagtcca cagattagc aatcaaggaa gacgccatca gggaagccac atccttagtc aaccagttgc atcgtgcggg gcaaaatgag gagcagaggc atggaggagg gagggctggg atgggaatag cagaaccacc atgtcttcag tgattgaaac tcatacccca ttgccccttg cctccagtc tccccttcag aaacatctct gctctctgtg aaataaacca tgctctcttg	Homo sapiens
96	1103	Corticotropin releasing factor	MDAALHSIL EANCSLALAE ELLLDGWGPP LDPEGPVSYC NTTLDDQIGTC WPSAAGALV P ERPCEYFNG VKYNTTRNAY RECLENGTWA SKINYSQCEP ILDDKQRKYD LHYRIALVWN YLGHCVSVAALVAALLFLA LRSIRCLRNV IHNWLIITFI LRNVWFLLQ LVDHEVHESN		Homo sapiens

Receptor 2	1240	Dopamine Receptor D1	NM_000794	97	Receptor 2
EWCHCITTI	FNYPVVTNFF	WMFVEGCVLH	TAIVMTYSTE	RLRKCLFLFI	GWCIPIFFIIV
AWAIGKLYE	NEQCWFGKEP	GDLVDYIQG	PIILVLLINE	VELFNIVRIL	MTKLRASTTS
ETIQYRKAVK	ATLIVLLPLL	ITYMLFFVNP	GEDDLSQIMF	IYFNSFLQSF	QGFVSVFYC
FFNGEVRSAV	RKRWRWQDH	HSLRVPMARA	MSIPTSPTRI	SFHSIKQTAA	V
ggctcgctgc	ctcgcatctgc	cgagcgtcc	tgagaggtcg	cgggcagtcg	ctcgggggag A
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agccctctgc	tgctttccaa	cacacaatta	actccgtttc	caaatatatt	ccagtgtatt

Homo  
sapiens

Homo  
sapiens

P

NP\_000785.1

1240 Dopamine  
Receptor D1

98

ttctgtgttg ttcatagtca atcaaacagg gacactacaa acatggggag ccataagggg  
 catgtctttg gttcagaat tgtttttaga aattattct tatcttagga ttaccacaa  
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 RYWAISSPFR YERKMTPKAA FILISVAVTL SVLISFIPVQ LSWHKAKPTS PSDGNATSLA  
 ETIDNCDSSL SRTYAISVV ISFYIPVAIM IVTYTRIYRI AQKQIRRIA LERAHVHAKN  
 CQTTNGKPK VECSPESSE KMSFKRETKV LKTLVIMGV FVCCWLPFFI LNCILPFCGS  
 GETQFFCIDS NTFDVFVWFG WANSSINPII YAFNADFRKA FSTLLGCYRL CPATNNAIET  
 VSINNGAAM FSSHHEPRGS ISKECNLVYL IPHAVGSSSED LKKEEAAGIA RPLEKLSPAL  
 SVILDYDITDV SLEKIQIPITQ NGQHPT

99

NM\_000798

1241 Dopamine  
Receptor D5Homo  
sapiens

A

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100	1241	Dopamine Receptor D5	NP_000789.1	MLPPGNSGTA YPGQFALYQQ LAQNAVGGG AGAPPLGPSQ VVTACLILL IITWLLGNVL P VCAAIVRSRH LRANMTNVFI VSLAVSDLFV ALLVMPKRAV AEVAGYWPFG AFCDVWVAFD IMCSTASILN LCVISVDRYW AISRPFRYKR KMTQRMALVM VGLAWTSLIL ISFIPVQLNW HRDQAASWGG LDLPNNLANW TPWEEDFWEP DVNAENCDS LNRTYAISSS LISFYIPVAI MIVTYTRIYR IAQVQIRRI SLERAAEHAQ SCRSSAACAP DTSIRASIKK ETKVLKTLVS IMGVFECCWL PFFILNCMPV FCSGHPGPP AGFPCVSETT FDFVFWFGWA NSSLNPVIYA FNADFQKVEA QLLGCSHFCS RTPVETVNIS NELISYNDI VFHKEIAAAY IHMMPNAVTP GNREVNDDEE EGFDFRMFQI YQTSPDGDPV AESVWELDCE GEISLDKITP FFPNGFH agagctctggc caccagtggt gctccacggc ctgagtgatc cactgaatct gctctggtat A gatgatgac tggagaggca gaactggagc cggcccttca cgggtcaga cgggaaggcg gacagacccc actaacaact ctatgccaca ctgctcacc ctgctcagc tgtcctcgc ttcggcaacg tctgtgtgtg catgggtgtg tcccgcgaga aggcgctgca gaccaccacc aactacctga tctcagcct cgcagtggtg gacctctcg gaccacact ggtcatgccc tgggttgtct acctggaggt ggtaggtgag tggaaattca gcaggattca ctgtgacatc ttcgtcactc tggacgtcat gatgtgcacg gcgagcatcc tgaactgtg tgccatcagc atcgacaggt acacagctgt ggccatgccc atgctgtaca atacgcgcta cagctccaaag cgccgggtca ccgtcatgat ctccatcgtc tgggtcctgt ccttcaccat ctctgcccc ctcctcttcg gactcaataa cgcagaccag aacgagtgca tcattgcaa ccgggcttc gtggtctact cctccatcgt ctcttctac gtgcccctca ttgtaccct gctggtctac atcaagatct acattgtct ccgcagacgc cgcaagcgag tcaacaccaa acgacgagc cgagctttca gggcccacct gagggctcca ctaaaaggca actgtactca ccccgaggac atgaaaactct gcaccgttat catgaagtct aatgggagtt tccagtgaa caggcgagga gtggaggctg cccggcgagc ccacatccca cccagtcaga tgctctccag caccagccca ccgagagga cccggtacag ccccatccca cccagtcac ccagctgac tctccccgac ccgtccacc atggtctcca cagactccc gacagccc ccaaacaga gaagaatggg catgccaaaag accaccccaa gattgccaag atctttgaga tccagacct gcccaatggc aaaaccgga cctccctcaa gaccatgagc cgttagaagc tctccagca gaaggagaag aaagccactc agatgtctgc cattgtctc ggcgtgttca tcatctgtg gctgcccctc ttcatcacac acatcctgaa catacactgt gactgcaaca tcccgcctgt cctgtacagc	Homo sapiens
101	1242	Dopamine Receptor D2	NM_000795	agagctctggc caccagtggt gctccacggc ctgagtgatc cactgaatct gctctggtat A gatgatgac tggagaggca gaactggagc cggcccttca cgggtcaga cgggaaggcg gacagacccc actaacaact ctatgccaca ctgctcacc ctgctcagc tgtcctcgc ttcggcaacg tctgtgtgtg catgggtgtg tcccgcgaga aggcgctgca gaccaccacc aactacctga tctcagcct cgcagtggtg gacctctcg gaccacact ggtcatgccc tgggttgtct acctggaggt ggtaggtgag tggaaattca gcaggattca ctgtgacatc ttcgtcactc tggacgtcat gatgtgcacg gcgagcatcc tgaactgtg tgccatcagc atcgacaggt acacagctgt ggccatgccc atgctgtaca atacgcgcta cagctccaaag cgccgggtca ccgtcatgat ctccatcgtc tgggtcctgt ccttcaccat ctctgcccc ctcctcttcg gactcaataa cgcagaccag aacgagtgca tcattgcaa ccgggcttc gtggtctact cctccatcgt ctcttctac gtgcccctca ttgtaccct gctggtctac atcaagatct acattgtct ccgcagacgc cgcaagcgag tcaacaccaa acgacgagc cgagctttca gggcccacct gagggctcca ctaaaaggca actgtactca ccccgaggac atgaaaactct gcaccgttat catgaagtct aatgggagtt tccagtgaa caggcgagga gtggaggctg cccggcgagc ccacatccca cccagtcaga tgctctccag caccagccca ccgagagga cccggtacag ccccatccca cccagtcac ccagctgac tctccccgac ccgtccacc atggtctcca cagactccc gacagccc ccaaacaga gaagaatggg catgccaaaag accaccccaa gattgccaag atctttgaga tccagacct gcccaatggc aaaaccgga cctccctcaa gaccatgagc cgttagaagc tctccagca gaaggagaag aaagccactc agatgtctgc cattgtctc ggcgtgttca tcatctgtg gctgcccctc ttcatcacac acatcctgaa catacactgt gactgcaaca tcccgcctgt cctgtacagc	Homo sapiens

102	1242	Dopamine Receptor D2	NP_000786.1	<p>gcttcaactg ggctgggcta tgtcaacagc gccgtgaacc ccatcatcta cacaacttc  aacattgagt tccgcaaggc cttctgaag atcctccact gctgactctg ctgctgccc  gcacagcagc ctgcttccca cctccctgcc caggccggcc agcctcacc ttgcgaaccg  tgagcaggaa ggctgggtg gatcgccctc ctctcttag ccccgccagg cctgcagtg  ttcgctggc tccatgctcc tcaatgccc cacaacctca ctctgccagg cagtgtctag  tgagctggc atggtaccag cctggggct cagcccgct caggggcagc tcatagagtc  ccccctccca cctccagtc cctatcctt ggcacaaaag atgcagccg cttccttgac  cttctctgg ggctctaggg ttgctggagc ctgagtcagg gccagaggc tgaatttct  ctttgtggg cttggcgtgg agcaggcggg ggggagagat ggacagtca cacttgcaa  ggccacagg aggcaagcaa gctctcttg cgaggagcca ggcaacttca gtcctgggag  acccatgtaa ataccagact gcaggttggg cccgagagat tcccaagcca aaacacttag  ctcctcccg caccctgatg tggacctcta cttccaggc tagtccggac ccactcacc  ccgttacagc tcccaagtg gttccacat ccttgagaa gaggagccct catctgaag  ggccagagag ggtctatggg gagaggaaat ccttgcccta gccaccctg ctgcttctg  acggccctgc aatgtatccc ttctcacagc acatgtggc cagcctggg cctggcaggg  aggtcaggcc ctggaaactct atctggcct gggctaggga catcagaggt tcttgaggg  actgctctg ccacactctg acgcaaaacc acttctctt tctatcctt ctggccttc  ctctctctg tttcccttc cttccactgc ctctgctta gaggagccca cggtaagag  gctgctgaaa accatctggc ctggcctggc cctgccccga ggaaggagg gaagctgcag  cttgggagag cccctgggc ctgactctg taacatcact atccgatgca ccaactaat  aaaacttga cgagtccact tc</p>	<p>MDPILNSWYD DDLERQNSR PFNGSGKAD RPHYNYATL LTLIAVIVF GNVLVMAVS P  REKALQTTN YLIVSLAVD LLVATLVMPW VVYLEVGEW KFSRIHCDIF VTLDVMMCTA  SILNLCAISI DRYTAVAMP LYNTRYSSKR RVTVMISIVW VLSFTISCPL LFGLNNADQN  ECIIANPAFV VYSSIVSFYV PFIVTLLVYI KIYIVLRRR KRVTKRSSR AFRAHLRAPL  KGNCTHPEDM KLCTVIMKSN GSFPVNRVV EAARRAQELE MEMLSSTSP ERTRYSPIPP  SHHQLTLPDP SHHGLHSTPD SPAPKPKNGH AKDHPKIAKI FEIQTMPNGK TRTSILKTMRS  RKLSQQKEKK ATQMLAIVLG VFICWLPPF ITHILNIHCD CNIPPVLYSA FTWLGYNVNSA  VNPIIYTTFN IEFKAFLLKI LHC</p>	Homo sapiens
103	1243	Dopamine Receptor D3	NM_000796	<p>taaagaaaac ggatacattc gaagcagct atgaacacatg cactaaggct taataggaa A  gctggaaaag cagcactcaa gtaatttcac cttagaggca aaaaagggtg attcttct  gttcatttca tagtttctga gtcctgagaa aggcaaaagt tgccttgctt gggatgtct  gctgtcagta aatggctgca ggagccgaag tggtaaacct ctcggtctcc agaatcaga  agaaaattt aggaagcccc ttggcatcac gcacctccct ctgggctatg gcactctga  gtcagctgag tagccacctg aactacacct gtggggcaga gaactccaca ggtgccagcc  aggccccccc acatgcctac tatgccctct cctactgcgc gctcactctg gccatcgtct  tcggcaatgg cctgggtgtgc atggctgtgc tgaaggagcg ggcctgtcag actaccacca  actacttagt agtgagcctg gctgtggcag acttgctggt ggcacacttg tgatgccct  gggtgtata cctggaggtg acaggtggag tctggaaatt cagccgcat tctgtgtatg  ttttgtcac cctggatgtc atgatgtga cagccagcat cctaatctc tgtgccatca  gcatagacag gtacactgca gtggtcatgc ccgttacta ccagcatggc acgggacaga</p>	<p>taaagaaaac ggatacattc gaagcagct atgaacacatg cactaaggct taataggaa A  gctggaaaag cagcactcaa gtaatttcac cttagaggca aaaaagggtg attcttct  gttcatttca tagtttctga gtcctgagaa aggcaaaagt tgccttgctt gggatgtct  gctgtcagta aatggctgca ggagccgaag tggtaaacct ctcggtctcc agaatcaga  agaaaattt aggaagcccc ttggcatcac gcacctccct ctgggctatg gcactctga  gtcagctgag tagccacctg aactacacct gtggggcaga gaactccaca ggtgccagcc  aggccccccc acatgcctac tatgccctct cctactgcgc gctcactctg gccatcgtct  tcggcaatgg cctgggtgtgc atggctgtgc tgaaggagcg ggcctgtcag actaccacca  actacttagt agtgagcctg gctgtggcag acttgctggt ggcacacttg tgatgccct  gggtgtata cctggaggtg acaggtggag tctggaaatt cagccgcat tctgtgtatg  ttttgtcac cctggatgtc atgatgtga cagccagcat cctaatctc tgtgccatca  gcatagacag gtacactgca gtggtcatgc ccgttacta ccagcatggc acgggacaga</p>	Homo sapiens

104	1243	Dopamine Receptor D3	NP_000787.1	<p>gctcctgtcg gcgcgtggcc ctcctgatca cggccgtctg ggtactggcc ttgtctgtgt  cctgccccct tctgtttggc tttatatacca caggggaccc cactgtctgc tccatctcca  accctgattt tgtcatctac tcttcagtgg tgtccttcta cctgccccctt ggagtactg  tccttgctta tgcagaatc tatgtggtgc tgaacaaaag gagacgaaa agtatctca  ctgcacagaa cagtcagtgc aacagtgtca ggcctggctt cccccacaa accctctctc  ctgacccggc acatctggag ctgaagcgtt actacagcat ctgccaggac actgccccgg  gtggaccagg cttccaagaa agaggaggag agttgaaaag agaggagaag actcgggaatt  ccctgagtc caccatagcg cccaagctca gcttagaagt tcgaaaactc agcaatggca  gattatcgac atctttgaag ctggggcccc tgcaacctcg gggagtgcca ctctgggaga  agaaggcaac ccaaatggtg gccattgtgc ttggggccct cattgtctgc tggctgccct  tcttcttgac ccatgttctc aataccact gccagacatg ccacgtgtcc ccagagcttt  acagtggcac gacatggctg ggctacgtga atagcgcct caacctgtg atctatacca  ccttcaatat cgagttcccg aaagccttcc tcaagatcct gtcttgctga gggagc  MASLSQLSSH LNYTCGAENS TGASQARPHA YYALSYCALI LAIVFGNGLV CMAVLKERAL P  QTTTNYLVVS LAVADLLVAT LVMPWVYLE VTGGVWFNSR ICCDVFVTLT VMMCTASILN  LCAISIDRYT AVMPVHYQH GTGSSCRRV ALMITAVWVL APAVSCPLLF GFNTGDPTV  CSISNPDEFVI YSSVVSFYLP FGVTVLVYAR IYVVLKQRRR KRILTRONSQ CNSVRPFPQ  QTLSPDPAHL ELKRYYSICQ DTALGGPGFQ ERGELKREE KTRNSLSPTI APKLSLEVRK  LSNGRLSTSL KLGPLQPRGV PLREKKATQM VAIVLGAFIV CWLPFFLTHV LNTHCQTCHV  SPELYSATW LGYVNSALNP VIYTFNIEF RKAFLKILSC</p>	Homo sapiens
105	1244	Dopamine Receptor D4	NM_000797	<p>atggggaaac gcagcacccg ggaagcggac ggtgtgctgg ctggggcgcg gccggcccg  ggggcatctg cgggggcac tgggggctg ctggggcagg gcgcggcggc gctggtgggg  ggcgtgctgc tcatcgccg ggtgctcgcg gggaactcgc tctgtgctgc gacgtggcc  accgagcgcg cctgcagac gccacacaa tcttcatcg tgagcctggc ggcgcggac  ctctctcg ctctctggt gctgcgctc tctgttact ccgaggtcca ggtggcgcg  tggctgctga gccccgcct gtgcgacgcc ctcattggcca tggacgtcat gctgtgcacc  gcctccatct tcaacctgtg cgcctacagc gtggacaggt tctgtggcct ggccgtggcg  ctgcgtaca accggcagg tgggagccgc cggcagctgc tgcctacgg cgcacgtgg  ctgctgtccg cggcggtggc ggcgcccgtta ctgtggggc tcaacagct ggcggcgcg  gaccccgccg tgtgcccct ggagggaccg gactacgtgg tctactctc cgtgtgctcc  ttcttctac cctgcccgt catgctgctg ctctactggg ccacgttccg cggcctgcag  cgtgggagg tggcacgtg cgcgaagtg cagggcgcg cgcgcgcgc accagcgcg  cctggcccg cttccccac gccaccccg ccccgctcc cccaggacc ctgcccgc  gactgtgcg ccccgcgcc cggcctccc cggggtccct gcggccccga ctgtcgccc  gcgcgcgcg gcctccccg ggacccctgc ggcgcgcct gtgcgcccc cgcgcgcgc  ctccccagg accctgcg ccccgactgt gcgcgcgcg cgcgcgcct tccccgggt  cctggcgcc ccgactgtg gcccccgcg ccccgctcc cccaggacc ctgcccgc  gactgtgcg cccccgcg cggcctccc cgggacctc cgggctcaa ctgtgctcc  cccgacgcg tcagagccg cgcgctccc ccccgactc caccgacag ccgagggag  cggcgtgcca agatcacgg cgggagcg aaggccatga ggttctgct ggtgtggtc  ggggccttcc tctgtgtgtg gacgccccct tctgtgtgtg acatcacgca ggcgtgtgt</p>	Homo sapiens

106	1244	Dopamine Receptor D4	NP_000788.1	<p>cctgectgct ccgtgcccc ccgtgctgctc agcgccgtca cctggctggg ctacgtcaac  agcgccctca acccgtcat ctacactgtc ttcaacgcc agttccgcaa cgtctccgc  aaggccctgc gtgctgctg ctgagccggg caccgccgga cgcgcccg cctgatggcc  aggcctcagg gaccaaggag atggggaggg cgcttttgta cgttaattaa acaattcct  tccc</p>	Homo sapiens
107	1267	Opioid Receptor, delta 1 (OPRD1)	NM_000911	<p>MGNRSTADAD GLLAGRPAA GASAGASAGL AGQGAALVG GVLLIGAVLA GNSLVCVSPA P  TERALQTPIN SFIVSLAAD LLIALILVPL FVYSEVOGGA WLLSPRLCDA LMAMDVMLCT  ASIFNLCAIS VDRFVAVP LRYNRQGSR ROLLIGATW ILSAAVAAPV LCLNDVRGR  DPAVCRLEDR DYVYSSVCS FFLEPCIMLL LYWATFRGLQ RWEVARRAKL HGRAPRRPSG  PGPPSPTPPA PRLPQDPCG DCAPPAPGLP RGPCGPDCA AAPGLPPDPC GPDCAAPPAG  LPQDPCGPD APPAPGLPRG PCGPDCAAPA PGLPQDPCG DCAPPAPGLP PDPCGNCAP  PDAVRAAALP PQTTPQTRR RRAKITGRER KAMRVLVVV GAFLLCWTF FVHITQALC  PACSVPPRLV SAVTWLGYVN SALNPVIYTV FNAEFNRVFR KAIRACC</p>	Homo sapiens

108	1267	Opioid Receptor, delta 1 (OPRD1)	NP_000902.1	cagggcatct ccaggaaggc ggggcttcaa ccttgagaca gcttcgggtt ctaacttgga gccggacttt cggagttggg gggctccggg ccc MEPAPSAGAE LQPPLFANAS DAYSAFPPSA GANASGPPGP GSASSLALAI AITALYSAVC P AVGLLGNVLV MFGIVRYTKM KTAINIYIFN LALADALAYS TLPFQSAKYL METWPFGE LL KAVLSIDYY NMFTSIFTLT MMSVDRYIAV CHPKALDFR TPAKAKLINI CIWVLASGVG VPIMVAVTR PRDGAIVCML QFPSWSYWD TVTKICVFLF AFVVPILIIIT VCYGLMLLRL RSVRLLSGSK EKDRSLRIT RMVLVVVGF VVCWAPIHIF VIVWTLVDID RRDPLVVAAL HLCIALGYAN SSLNPVLYAF LDENFKRCFR QLCKRKCGRP DPSSFRRPRE ATARERTAC TPSDGPGGGR AA	Homo sapiens
109	1424	Duffy Antigen	NM_002036	gggcctgaac caaacgggtgc catggggaac tgtctgcaca ggggtgagat ggggccaggc A cccagagtcc cttatcccta tgcccctcat ttcccctgct gtttgcccct cagtccttat atctcttctc ttctctctc atctttctc ccttcccgt ttttccctc tccctcaaaag tcttttctc tctctcttc ctatgctagc cctctagtc cctcttggtt cctcccttt gcttttgagt cagttccatc ctggtctctt ggtgccttc cttctgacct tgcactgctc ctccagcccc agctgcccgt gcttcccag gactgttctc gctccggctc ttcaggctcc ctgctttgtc ctttccact gtcgcactg catctgactc ctgcagagac cttgttctcc cacccgacct tctctctgt cctccctcc cactgccc tcaattccca ggagactctt ccggtgtaac tctgatggc tctctgggt atgtctcca ggcggagctc tcccctcaa ctgagaactc aagtcagctg gactcgaag atgtatgaa tcttctctat ggttgaatg attccttccc agatggagac tatgatgcca acctggaagc agctgcccc tgcactcct gtaacctgct ggatgactct gcactgccc tcttccact caccagtgc ctgggtatcc tagctagcag cactgtctc tcatgtctt tcagacctt cctccgtgg cagctctgct ctggctggcc tgcctggca cagctggctg tgggcagtc cctcttcagc attgtggtg ccgtcttgcc cccagggcta ggtagcactc gcagctctgc cctgtgtagc ctgggctact gtgtctgcta tggctcagcc ttgcccagg ctttgctgct aggtgacct gctccctgg gccacagact ggtgtaggc caggtcccag gctcaccct ggggctcact gtgggaattt ggggagtggc tgccctactg acactgcctg tcaccctggc cagtgtgct tctggtggac tctgcacct gatacagc acgagctga aggctttgca agccacacac actgtagcct gtcttgccat cttgtcttg ttgcatggg gtttgttgg agccaaaggg ctgagaagg cattgggtat ggggccaggc cctggatga atactcgtg ggcctgggtt atttctggt ggcctcatgg ggtggttcta ggaactgatt tctggtgag gtccaaagctg ttgctgtgt caacatgtct gggccagcag gctctggacc tgctgctgaa cctggcagaa gcccggcaa tttggcactg tgtgctacg cccctgctc tcgcccatt ctgccaccag gccaccgca ccctctggc ctctctgcc cctcctgaag gatggtctc tcatctggac accctggaa gcaaatcccta gtctcttc cactgtcaa cctgaattaa agtctacact gctttgtg DSALPFILT SVLGILASST QLFEDVWNS SYGVNDSFPD GDYDANLEAA APCHSNLLD P GLGSTRSSAL CSLGYCVWYG SAFAQALLLG CHASLGPGLV AGQVPGTLTG LTVGIWGVAA LLTLPVTLAS GASGGLCTLI YSTELKALQA THTVACLAIF VLLPLGLFGA KGLKALGMG PGPWNILWA WFIWPHGV VLGLDFLVR KLLLLSTCLA QQALDLLNL AEALAILHCV ATPLLLALFC HQATRTLPS LPLPEGWSSH LDTLGSKS	Homo sapiens
110	1424	Duffy Antigen	NP_002027.1	gcaaatcccta gtctcttc cactgtcaa cctgaattaa agtctacact gctttgtg MASSGYVLQA ELSPSTENS QLFEDVWNS SYGVNDSFPD GDYDANLEAA APCHSNLLD P DSALPFILT SVLGILASST QLFEDVWNS SYGVNDSFPD GDYDANLEAA APCHSNLLD P GLGSTRSSAL CSLGYCVWYG SAFAQALLLG CHASLGPGLV AGQVPGTLTG LTVGIWGVAA LLTLPVTLAS GASGGLCTLI YSTELKALQA THTVACLAIF VLLPLGLFGA KGLKALGMG PGPWNILWA WFIWPHGV VLGLDFLVR KLLLLSTCLA QQALDLLNL AEALAILHCV ATPLLLALFC HQATRTLPS LPLPEGWSSH LDTLGSKS	Homo sapiens

111	1451	EBV-Induced Gene 2	NM_004951	ggaattccct gatatacacc tggaccacca ccaatggata tacaatggc aaacaatttt A actccgccct ctgcaactcc tcagggaat gactgtgacc tctatgcaca tcacagcacg gccaggatag taatgcctct gcattacagc ctgctcttca tcaatgggct cgtgggaaac ttactagcct tggctgtcat tgttcaaac aggaataaaa tcaactctac caccctctat tcaacaaatt tgggtgatttc tgatataact tttaaccacc ctttgcctac acgaatagcc tactatgcaa tgggcttttg ctggagaact ggagatgcct tgtgtaggat aactggcgta gtgttttaca tcaacacata tgcagggtg aactttatga cctgcctgag tattgacgc ttcattgctg tgggtgcacc tctacgctac acaagataa aaaggattga acatgcaaaa ggcgtgtgca tatttgtctg gattctagta ttgtctaga cactcccact cctcatcaac cctatgtcaa agcaggaggc tgaaggatt acatgcattg agtatccaaa ctttgaagaa actaaatctc ttccctggat tctgcttggg gcattgttca taggatagt acttccactt ataatcattc tcattgtgta ttctcagatc tgcgtcaaac tcttcagaac tgccaacaa aaccactca ctgagaaatc tgggtgtaaac aaaaaggctc tcaacacaaat tattcttatt attgttgtgt ttgttctctg ttccacact taccattgtt caattattca acatattgatt aagaagcttc gtttctctaa ttctctgaa tttagccaaa gacattcgtt ccagatttctt ctgcacttba cagtatgcct gatgaacttc aattgctgca tggaccttt tatctacttc tttgcattga aagggtataa gagaaagggt atgaggatgc tgaacggca agtcagtga tcgatttcta gtgctgtgaa gtcagccct gaagaaaatt cacgtgaaat gacagaaacg cagatgatga tacattccaa gtctcaaat ggaagtga atggattgta ttttgggtta tagtgacgta aactgtatga caactttgc aggcattccc ttataaagca aaataattgt tcagcttcca attagtattc ttttataatt cttctattgg gcactttccc atctccaact cggaagtaag ccaagagaa caacataaag caacacaaat aaagcacaat aaaaatgcaa ataaatattt tcatitttat ttgtaaacga atacaccaa aggagggcgt cttataaact cccaatgtaa aaagttttgt tttaataaaa aatttaatta ttatttctg ccaacaaatg gctagaagg actgaataga ttatatattg ccagatgta atactgtaac atacttttta aataacatat ttcttaaatc caaatttctc tcaatgttag atttaattcc ctcaataaca ccaatgtttt gtttgttct gttctgggtc ataaaaacttt gtttaaggaa tcttttgaa taaagagcag gatgctgc	Homo sapiens
112	1451	EBV-Induced Gene 2	NP_004942.1	MDIQMANNFT PPSATPQND CDLYAHHSTA RIVMPLHYSL VFIIGLVGNL LALVIVQNR P KKINSTTLYS TNLVISDILF TTALPTRIAY YAMGFDWRIG DALCRITALV FYINTYAGVN FMTCLSIDRF IAVVHPLRYN KIKRIEHAKG VCIFVWILVF AQTLP LLINP MSKQEAERIT CMEYPNFEET KSLPWILLGA CFIGYVLPLI IILICYSQIC CKLFRTAKQN PLTEKSGVKN KALNTIILII VVFLCFTPY HVALIQHMIK KLRFSNFLEC SQHRSFQISL HFTVCLMNFN CCMDPFIYFF ACKGYKRKVM RMLKRQVSUS ISSAVKSAFE ENSREMTETQ MMHKSNSNG K	Homo sapiens
113	1486	Endothelin B Receptor	NM_000115	gagacattcc ggtgggggac tctggccagc ccgagcaacg tggatcctga gagcactccc A aggtaggcatt ttgccccggt gggacgcctt gccagagcag tgtgtggcag gccccgtgg aggatcaaca cagtggctga acactgggaa ggaactgtct cttggagtct ggacatctga aacttggctc tgaactcgc cagcgggcac ggaacgcctt ctggagcagg tagcagcatg cagcgcctc caagtctgtg cggacgcgc ctggttgccg ttgttcttgc ctgggcctg tcgcggatct ggggagagga gagaggcttc ccgcctgaca gggccactcc gcttttgcaa	Homo sapiens

accgcagaga taatgacgcc accactaag accttatggc ccaaggggtc caagccagtg  
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114	1486	Endothelin B NP_000106.1 Receptor	acatgggtgct tttctttcat ctagagggcaa aactgctttt tgagaccgta agaacctctt agctttgtgc gttcctgcct aattttata tcttctaagc aaagtgcctt aggatagctt gggatgagat gtgtgtgaaa gtatgtacaa gagaaaacgg aagagagagg aaatgagtg gggttgagg aaacccatgg ggacagattc ccattcttag cctaaccgttc gtcatggct cgtcacatca atgcataaagg tccgtgattt gtccagcaa aacacagtcg aatgtctca gagtgaactt cgaaataaat tgggcccagg agcttttaact cggctttaa atagcccaa atatttactt tgttttctt ttaataggct ggccacatg ttggaataa gctagtaag ttgtttctg tcaatatga atgtatggt acagtaaac aaacccaac aatgtggca gaaagaaaga gcaataataa ttaattcaca caccatagg attctattt taaatcacc acaaacttgt tctttaattt catccaatc acttttcag aggcctgta tcatagaagt cattttagac tctcaattt aaattaattt tgaatcacta atattttcac agtttattaa tatattaat ttctattaa atttagatt attttatta ccatgtactg aattttaca tctgatacc ctttcttctt ccactgcagt atcatgttct ctaattatct tgccaaattt tgaaactaca cacaaaaagc atacttgcat tatttataat aaaattgcat tcagtggctt tttaaaaaa atgtttgatt caaaacttta acatactgat aagtaagaaa caattataat ttctttacat actcaaaacc aagatagaaa aaggtgctat cgttcaactt caaacatgt ttctagtat taaggacttt aatatagcaa cagacaaaat tattgttaac atggatgta cagctcaaaa gatttataaa agattttaac ctattttct ccttattatc cactgcta gtggatgtat gtcaaacac cttttagtat tgatagctta catatggcca aaggaataca gtttatagca aaacatgggt atgtgtgagc taactttata aaagtgtaat ataacaatgt aaaaaattat atacttgga ggttttttg gttgcctaaa gtggtctatg ttactgattt tttattatgt aagcaaaacc aataaaaaat taagtttttt taacaactac cttatttttc actgtacaga cactaatca ttaataacta attgattgtt taaaagaaat ataatgtga caagtggaca ttatttatgt taaatataca attatcaagc aagtatgaag ttattcaatt aaaaagccac atttctggtc tctggtg	Homo sapiens
115	1488	Endothelin A NM_001957 Receptor	SLARSLAPAE VPKGDRTAGS PPRITSPPPC QGPIEIKETF KYINTVWSCL VFVLGIIGNS TLRLRIYKNK CMRNGPNILI ASLALGDLH IVIDIPINNY KLLAEDWPFQ AEMCKLVPPFI QKASVGITVL SLCALSIDRY RAVASWSRIK GIGVPKWTV EIVLIWVSV VLAVPEAIGF DIITMDYKGS YLRICLLHPV QKTAFMQFYK TAKDWWLFSF YFCLPLAITA FFYTLMTCEM LRKKSQMQLA LNDHLKQRRE VAKTVFCLVL VFALCWLPFH LSRLKLTLY QNDPNRCEL LSFLVLVDYI GINMASLNSC INPIALYLV KRFKNCFKSC LCCWCQSFE KQSLKQSC LKFKANDHGY DNFSSNKYS SS gaattcgagg ccgctcttg cgggtcccaga gtggagtga aggtctggag ctttgggagg A agacggggag gacagactgg aggcgtgttc ctcggaggtt tctttttcg tgcgagccct cgcgcgcgcg tacagtcac cgcctggtct gacgatgtg gagagcggtt ggagagcctt catccatccc acccggtcgt cgcgggggat tgggttccc ggcacaccc cccgggagaa cgagtcccc ggaagtcttc tgaagccggg gaagctgtgc agccgaagcc gccgcccgc cgagagcccg gacacggcc accctccgc cccggcagct gtctgcgac gccgagctc acggtgaaa tggcccaagg gccgcgga cccggcagct gtctgcgac gccgagctc atatttctc aaattgctc aaaaagtga ggtgtaaaag cagcaaaagt gcaataagag atatttctc aaattgctc	Homo sapiens



caagatggaa accctttggc tcaggggcgc cttttgggtg gcactgggtt gatgtgtaat  
cagtataat cctgagagat acagcacaac tctaagcaat catgtggatg atttcaccac  
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accagcaat ggtcaatgc acaactatg cccacagcag actaaaaa cttcagcttt  
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atggtgtttt attacaaggg accttgaaca tgttttgtat gttaaattca aaagtaatgc  
ttcaatcaga tagttctttt tcacaagttc aatactgttt ttcatgtaaa ttttgtatga  
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cacctctat tctcttaatt ttgttataaa tgttaactgg cagtaagtct tttttgaca  
ttcccttttc catataggaa acataatttt gaagtgcca gatgagtta tcatgtcagt

116	1488	Endothelin A NP_001948.1 Receptor	gaaaaataat taccacaaa tgcaccagc aacttaacga ttcttcaact ctgggggttt tcagtatgaa cctaactccc caccacaaca tctccctccc acattgtcac catttcaaa ggccacagc gacttttgct gggcattttc ccagatgttt acagactgtg agtacagcag aaaatctttt actagtgtgt tggatataat atataacaa ttgtaaatTT cttagcccc attttctag actgtctctg tggatataat ttgtgtgtgt gatatagca tgtgtgtgat ggatgtatg gatttaactt aatctaataa ttgtgccccg cagttgtgccc aaagtgcata gtctgagcta aaatctaggt gattgttcat catgacaccc tgcctcagtc cattttaacc tgtagcaacc ttctgcattc ataaatcttg taatcatgtt accattacaa atgggatata agaggcagcg tgaagcaga tgagctgtgg actagcata taggggtttg ttgtgtgtgt tggtttgata agcagctatt tgggttcata ttgtttcttg tgcggagca aaagtccata cactttgaag tattatattg ttcttctct caattcaatg tggatgata attgccaggt tgtctgatat ttctttcaga ctgcgccaga cagattgtgt ataataaatt agttaagata attgtttggg ccataattta ggacaggtaa aataacatca ggttccagtt gcttgaattg caaggctaag agtactgccc ctttgtgtg ttgagctca aatctattat tccactggcg catcataagc agtgatatat gctataata taagccatag gttcacacca ttgtgtttag acaattgtct tttttcaag atgctttgtt tctttcatat gaaaaaaatg cattttataa attcagaaag tcatagattt ctgaaggcgt caacgtgcat ttattttatg gactgttaag taactgtggt ttactagcag gaattattcc aatttctacc ttactacat ctttcaaca agtaactttg tagaaatgag ccagaagcca aggccctgag ttggcagtg cccataagtg taaaataaaa gtttacagaa acctt	Homo sapiens
117	1598	Calcium-Sensing Receptor (CASR)	caacaggcac ctggctgcag ccaggaagga ccgcacgccc ttctcgcgag gagagtggaa A ggaggagct gtttgccagc accgaggtct tgcggcacag gcaacgcttg acctgagctt tgcagaatga aaggcatcac aggagccctc tgcagtatgt gcttccaaa gactcaagga ccaccacat tacaagtctg gattgaggaa tgcagaaatg gagattcaaa caccacgtct tctattattt tattaatcaa tctgtagaca tgtgtcccca ctgcaggag tgaactgctc caaggagaa actctggga gctccaaaac tctatcctt ctcacccctt gacctggaga gacggcagaa ccatggcatt ttatagctgc tgcgtgggtcc tcttggcact cactggcac acctctgctt acgggccaga ccagcgagcc caaaagaagg gggacattat ccttgggggg ctcttctcta ttcattttgg agtagcagc aaagataaag atctcaaatc aagcccgag tctgtggaat gtatcagcta taattccgt ggggttcgct ggttacaggc tatgatattt gccatagagg agataaacag cagccagcc ctcttccca acttgacgct gggatcacgg atatttgaca cttgcaaac cgtttctaag gcttggag ccacctgag tttgtgtgt caaaacaaaa ttgattcttt gaaccttgat gatttgca actgctcaga gcacattccc	Homo sapiens

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gccctaacc agcaagagca gcagcagcag cccctgaccc tccacagca gcaacgatct

118	1598	Calcium- Sensing Receptor (CASR)	NP_000379.1	MAFYSCCWVL LALTWHTSAY GPDQRAQKKG DIILGGLFPI HFGVAAKDQD LKSRPESVEC P IRYNFRGFRW IQAMIFAIEE INSSPALLPN LTLGYRIEFT CNTVSKALEA TLSFVAQNKI DSLNLDEFNC CSEHIPSTIA VVGATGSGVS TAVANLLGLF YIPQVSYASS SRLLSNKNQF KSLFRTIPND EHQATAMADI IEYFRWNWVG TIAADDDYGR PGIEKFEREA EERDIDIDFS ELISQYSDEE EIQHWVEVIQ NSTAKVIVVF SSGPDLEPLI KEIVVRNITG KIWLASEAWA SSSLIAMPQY FHVVGGTIGF ALKAGQIPGF REFLLKKVHPR KSVHNGFAKE FWEETFNCHL QEGAKGPLPV DTFLRGHEES GDRFSNSTA FRPLCTGDEN ISSVETPYID YTHLRISNV YLAVYSIAHA LQDIYTCPLG RGLFTNGSCA DIKKVEAMQV LKHLRHLNFT NNMGEQVTFD ECGDLVGNYS IINWHLSPED GSIVFEKVG YNVAKKGER LFINEEKILW SGFSREVPFS KEIEFLSWTE PFGIALTLFA VLGIELTAFV LGVFIKFRNT PIVKATNREL SYLLLSLLC CFSSSLFFIG EPQDWTCLRL QPAFGISFVL CISCILVKTN RVLLVFEAKI PTFHPRKWWG LNLQFLLVFL CTFMQIVICV IWLYTAPPSS YRNQELEDEI IFITCHEGSL MALGFLIGYT CLLAICFFFF AFKSRKLPEN FNEAKFITFS MLIFFIVWIS FIPAYASTYG KFVSAVEVIA ILAAAFGLLA CIFFNKIYII LFKPSRNTIE EVRCSTAAHA FKVAARATLR RSNVSRKRSS SLGGSTGSTP SSSISSKSNs EDPFPQPERQ KQQQPLALTQ QEQQQQPLTL PQQQRQQQP RCKQKVI PGS GTVTFSLSF EPQKNAMAHG NSTHONSLEA QKSSDTLTRH QPLLPLQGE TDLDLTVQET GLQGPVGGDQ RPEVEDPEEL SPALVSSSQ SFVISGGST VTENVVNS ggcacgagga acaacattt tgcaaaagt ggcgaacat tctgcctga caggaccatg A gacacaggtt gtagagatag agatggctct ggctgtgcat tcagcagatt ctgtagatag aattaatagg acttgatgg gattgtggtg agagaaagt aatgaaaga taagtcttag tttggaagt ttaacaactg aatgttttaa ctcaaataga cacaataat tggagagagt gcaggtttgg gaggatgaga caatcaactg tttggttgag ccacgttag tttgaaatgt ctacgggac ccgtggggag aggttatatc agactggagc accagagaga ggccaaggct gatagtttag atgaaaagag agcatgat ttttaagccct gagactggat aatatcacct atagaaagac tatatagaga taagagaggt ggggaacaa gaaagctgc gggacactcc taaatattaga gtcaaattta gaggagaaa tactagcaaa ggggactgaa aagcgggtggc caattgagct tcaaatgcaa gtgaaagtgt gttgtgtgta catttatcat ctcatggcac agggaaaacg tgatttaagg agaaggagc gatccaatgg gaagaagaga tccaatggat ccctatcac gaagatattg agataagaac caatatgat ttgcaccac tgatttgca gccttgaggt cataagcatc ctcaggaaaa tgcaccaggt gctgtgga agatggaaac	Homo sapiens
119	1676	Formyl Peptide Receptor- Like Receptor	NM_001462		Homo sapiens

120	1676	Formyl Peptide Receptor- Like Receptor	NP_001453.1	caactttctcc actcctctctga atgaatatga agaagtgtcc tatgagtctg ctggctacac tgtttctggg atcctcccat tgggtgtgct tgggtgcacc ttgtgtcctcg ggggtcctggg caatgggctt gtgactggg tgggtgatt cggatgaca cgcacagatca ccaccatctg ttacctgaac ctggccctgg ctgacttttc ttccagggcc acattaccat tccatctgt ctccatggcc atgggagaaa aatggccttt ttgtcgttc ctgtgtaagt taattcacat cgtggtggac atcaacctct ttggaagtgt ctcttgatt ggttcatgg cactggaccg ctgcattgt gtcctgcac cagctgggc cagaaccac cgcactgtga gtctggccat gaaggtgac gtcggacctt ggattcttgc tctagtctt accttgccag ttctcctctt ttgactaca gtaactattc caaatgggga cacatactgt acttcaact ttgcactctg gggtggcacc cctgaggaga ggctgaagt gccattacc atgctgacag ccagaggat tatccggttt gtcattggct ttagcttgcc gatgtccat gttgccatct gctatggct cattgcagcc aagatccaca aaagggcac gattaaatcc agcgtccct tacgggtcct cactgcttg gtgcttctt tctcatctg ttgtttccc ttcaactgg ttgccctct ggcacctgc tggctaaaag agatgttgt ctatggcaag tacaataca ttgacatct ggttaacca acgagctccc tggcctctt caacagctgc ctcaaccca tgccttaagt ctttgtggc caagacttcc gagagact gatccactc ctgcccacca gtctggagag ggccctgtct gaggactcag ccccaactaa tgacacggct gccaatctcg ctccactcc tgacagact gattacagg caatgtgagg atgggtcag ggatatttg agttctgttc atcctaccct aatgccagt ccagcttcat ctaccctga gtcataatga ggcattcaag gatgcacagc tcaagtattt attcagaaa aatgctttg tgcctctgat ttggggctaa gaaatagaca gtcaggctac taaaatatta gtgttattt ttgtttttg acttctgct ataccctggg gtaagtggag ttgggaaata caagaagaga aagaccagt gggatttga agacttagat gagatagcg ataaagggg gaagacttta aagtataaag taaaatgtt gctgtagggt ttttatagct attaaaaaa atcagattat ggaagttttc ttctatttt agtttgctaa gattttctg tttcttttcc ttacatcatg agtggacttt gcattttatc aaatgcattt tctacatgta ttaagatggt catattattc ttcttcttt atgtaaatca ttataaataa gtttcattaa gttctgaatg ttaaaactact cttgaattcc tggaataaac cacacttagt cctgatgtac tttaaatatt tatatctac aggagtgtgt tagaattct gtgtttatgt ttatatactg ttatttcaat ttttctacta tccgtgctaa gtttctatg aaaaaagga acaaagagaa acttgaatg gtctctgaaa aggaattgag aagtaattcc tctgattctg tttctggtg ttatatcttt attaaatatt cagaaaaatt c METNFSTPLN EYEEVSYESA GYTVLRILPL VVLGVTFLVG VLGNGLVIWV AGFRMTRVTV P TICYNLALA DFSFTATLPE LIVSMANGEX WPFGWFLCKL IHIVVDINLF GSVFLIGFIA LDRICICVLHP WVAQNHRVTS LAMKVIVGPW ILALVLTLPV FLFLTFTVTP NGDTYCTFNF ASWGGTPEER LKVAITMLTA RGIIRFVIGF SLPMSIVAIC YGLIAAKIHK KGMIKSRPL RVLTVAVASF FICWFPQLV ALLGTWMLKE MLFYGYKII DIIVNPTSSL AFFNSCLNPM LYFVFGQDFR ERLIHSPLTS LERALSEDSA PTNDTAANSA SPPAETELQA M cgtcgagatc tgtggaggtt ttctctgca atgcagaaa gaaatcaggt ggtgagatgc A ataattatgg cctgtcctct gttctcttg cttgcacagg ttgagcttggg ctcagatgt catcatcgga ctgtcactg ctctaacagg gttttctct gccagagag caaggtgaca gagattcctt ctgacctccc gaggaatgcc atgaaactga ggtttgtcct caccaagctt	Homo sapiens
121	1681	Follicle Stimulating Hormone Receptor	NM_000145		Homo sapiens

122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p>cgagtcaccc aaaaaggtgc attttcagga tttggggacc tggagaaaa agagatctct  cagaatgatg tcttgagggt gatagaggca gatgtgttct ccaaccttcc caaatatcat  gaaattagaa ttgaaaaggc caacaacctg ctctacatca ccoctgaggc ttccagaaac  cttcccaacc ttcaatatct gttaatatcc aacacagtta ttaagcacct tccagatggt  cacaagattc attctctcca aaaggtttta cttgacattc aagataacat aaacatccac  acaattgaaa gaaattcttt cgtggggctg agctttgaaa gtgtgatctt atggctgaat  aagaatggga ttcaagaaat acacaactgt gcattcaatg gaaccaact agatgcagtg  aatctaagcg ataataataa tttagaagaa ttgcttaatg atgttttcca cggagcctct  ggaccagtca ttctagatat ttcaagaaca aggatccatt cctgcctag ctatggctta  gaaaatctta agaagctgag ggccaggtcg acttacaact taataaagct gcctactctg  gaaaagcttg tgcctctcat ggaagccagc ctacactatc ccagccattg ctgtgccttt  gaaaactgga gacggcaaat ctctgagctt ctccaattt ccaacaaatc tattttaagg  caagaagtgg attatatgac tcaggctagg ggtcagagat cctctctggc agaagacaat  gagtcacagt acagcagagg atttgacatg acgtacactg agtttgacta tgacttatgc  aatgaagtgg ttgacgtgac ctgtccctct atgtgttta tcagcatcct ggcatacact  atcatgggtg acaacatcct cagagtcctg atgtgttta tcagcatcct ggcatacact  gggaacatca tagtgctagt gatcctaact accagccaat ataaactcac agtccccagg  ttccttatgt gcaacctggc ctttgctgat ctctgcatg gaatctacct gctgctcatt  gcacagttg atatccatc caagagccaa tatcacaact atgccattga ctggcaaaact  gggacaggt gtgatgctg tggcttttct actgtcttgg ccagttagct gtcagtctac  actctgacag ctatcacctt ggaagatgg cataccatca cgcattgcat ttgtgtttt  tgcaaggtgc agctccgcca tctgcccagt gtcattggtga tgggctggat ttgtgtttt  gcagctgccc tcttcccat ctttggcatc agcagctaca tgaaggtgag catctgcctg  cccatggata ttgacagccc ttgttcacag ctgtatgtca tgtccctcct tgtgtcctaat  gtcctggcct ttgtggtcat ctgtggctgc tatatccaca tctacctcac agtgcggaac  cccaacatcg tctcctcctc tagtgacacc aggatcgcca agcgcattgg catgctcatc  ttcactgact tctctgcat ggcaacctt tcttcttgg ccatttctgc cctcctcaag  tgccccctca tcactgtgtc caaagcaaa atctgtctgg ttctgtttca cccatcaaac  tctgtgcca acccttctct ctatgccatc ttaccacaaa actttcgag agatttcttc  attctgctga gcaagtgtgg ctgctatgaa atgcaagccc aaatttatag gacagaaact  tcatccactg tccacaacac ccatccaagg aatggccact gctcttcagc tccagagtc  accagtgggt ccacttacat actgtccctc ctaagtcatt tagcccaaaa ctaaaaacac  atgtgaaaat gtatctgagt attgaatgat aattcagtc ttgcctttga aggtatgtc  acaagggagct gacagtgcct ctacacattt catctaatc aatattcctg gcatacctt  aaggtaaatt ggtcaggaac tattaattcc atgtatata ttaggaagct gaattattag  taacacaact aataattaaa gaatgcaata ctgtaaaaa gcggccgcga att</p>	Homo sapiens
				<p>MALLIVSLLA FLSLGGCHH RICHCSNRVF LCQESKVEI PSDLPNAIE LRFVITKLRV P  IQKGFSGFG DLEKIEISON DVLEVIEADV FSNLPKLHEI RIEKANNLLY ITPEAFQNLN  NLQYLLISNT GIKHLPDVHK IHSLOKVLDD IQDNINIHIT ERNSFVGLSF ESVILWLNKN  GIQEIHNCAF NGTQIDAVNL SDNNNLEELP NDVFHGASGP VILDISRTRI HSLPSYGLN  LKKLRARSTY NLKKLPTLEK LVALMEASLT YPSHCCAFAN WRRQISELHP ICNKSILRQE</p>	

123	1726	G Protein- Coupled Receptor RDC1	U67784	<p> VDMTQARGQ RSSLAEDNES SYSRGDMTY TEFDYDLCNE VDVTCSPKP DAFNPCEMIM  GYNILRVLIW FISILAITGN IIVLVILTS QYKLTVPRL MCNLAFAADLC IGIYLLIAS  VDIHTKSQYH NYAIDWQTGA GDAAGFFTV FASELSVYTL TAITLERWHT ITHAMQLDCK  VQLRHAASVM VMGWIFAFAA ALFPIFGISS YMSISICLPM DIDSPLSQLY VMSLLVLNVL  AFVVICGCIY HIYLTVRNPN IVSSSDTRI AKRMAPLIF DFLCMAPISE FAISASLKVP  LITVSKAKIL LVLFHPINSC ANPFLYAI FT KNFRDRDFIL LSKGCIYEMQ AQIYRTETSS  TVHNTHPRNG HCSSAPRVTS GSTYILVPLS HLAQN  gccaaactccg tgggtggtctg ggtgaatatac caggccaaga ccacaggcta tgacacgcac A  tgctacatct tgaacctggc cattgccgac ctgtgggttg tccacacat ccagtcctgg  gtgtcagtc tctgtcagca caaccagtgg cccatggggc agtcacagt caaagtcaca  caccatcatc tctccatcaa cctcttcagc agcatcttct tctcacagt catgagcgtg  gaccgtacc tctccatcac ctacttcacc aacaccccca gcagcaggaa gaagatggta  cgccgtgctg tctgcatcct ggtgtggtcg ctggccttct cctgtctctt gctgacacc  tactacctga agaccgtcac gtctggtctc acaaatgaga cctactgccg gctcttctac  cccgagcaca gcatcaagga gtggtgctgc ggcattggagc tggctcctcg tctcttgggc  tttgccgttc cctctccat tatcgtctgc tctacttcc tgctggccag agccatctcg  gcgtccagt accaggagaa gcacagcagc cggaagatca tcttctccta cgtggtggtc  ttcctgtctc gctggttgcc ctaccacgtg gcggtgctgc tggacatctt ctccatcctg  cactacatcc ctttcacctg ccggtgggag cagccctctc tccagccctt gcatgtcaca  cagtgccgtg cgtggtgca ctgctgcctc aacctctcc tctacagctt catcaatcgc  aactacaggt acgagctgat gaaggccttc atcttcagt actcggccaa aacagggtc  accaagctca tcatgctc cagagctc cagagctc gagagagat actcgtcctt ggagcagagc  accaaatgat ctgcccctga gaggctctg gacgggttta cttgtttttg aacagggtga  tgggcccctat ggttttctag agcaaaagcaa agtagcttcg ggtcttgatg cttgagtaga  tggaagaggg gagcacgtgc cccctgcctc cattctctc tctcttgat gacgcagctg  tcatttggct gtgctgctg acagttttgc aacaggcaga gctgtgtgc acagcagtg  tgtgctcag agccagctga ggacagcctt gctggactt ctgtaagata ggttttctg  tgttctctga atttttata tggtagtttg tatttaaat ttaagactt atttctcac  tattggtga cctataaat gtattgaaa gttataata ttttaaat tgtttgggag  gcatagtgct gacataatc cagagtgttg tagttttaag gttagcgtga cttcagttt  tgactaagga tgacactaat tgttagctgt tttgaaata tatatatata aatatataaa  tatatgccag tcttgctga aatgtttat ttaccatagt tttatatctg tgtgtgtgtt  tgtaccggca cgggatatgg aacgaaaact gctttgtaag gcagtttgtg acattaaatg  tattgtaaa tgactttta aataaaacaa aaaaactgtc tggactgcaa atctgcacac  acaacgaaca gttgcatttc agagagttct ctcaatttgt aagttatttt tttttaataa  agatttttgt ttcctaaaaa aaaaaaaa aaaaaa  MDLHLFDYAE PGNFSDISWP CNSSDCIVVD TVMCPNPNK SVLLYTLSTF YIFIFVIGMI P  ANSVVVWVNI QAKFTGYDTH CYILNLAIAD LWWVLTPVW VVSLVQHNQW PMGELTCKVT  HLIFSINLFS GIFFLTGMSV DRYLSITYFT TWPSSRKXKV RVVVCILVWL LAFCVSLPDT  YYLKTVTSS NNETYCRSFY PEHSIKEWLI GMELSVVLG RAVPFSIIAV FYFLIARAI  ASSDQEKHSS RKIIFSYVW FLVCWLPYHV AVLLDIFSIL FIYPFCTCRLE HALFTALHVT </p>	Homo sapiens
124	1726	G Protein- Coupled Receptor RDC1	AAA62370.1	<p> MDLHLFDYAE PGNFSDISWP CNSSDCIVVD TVMCPNPNK SVLLYTLSTF YIFIFVIGMI P  ANSVVVWVNI QAKFTGYDTH CYILNLAIAD LWWVLTPVW VVSLVQHNQW PMGELTCKVT  HLIFSINLFS GIFFLTGMSV DRYLSITYFT TWPSSRKXKV RVVVCILVWL LAFCVSLPDT  YYLKTVTSS NNETYCRSFY PEHSIKEWLI GMELSVVLG RAVPFSIIAV FYFLIARAI  ASSDQEKHSS RKIIFSYVW FLVCWLPYHV AVLLDIFSIL FIYPFCTCRLE HALFTALHVT </p>	Homo sapiens

125	1762	Galanin Receptor GalR1	NM_001480	QCLSLVHCCV NPVLYSFNR NYRYELMKAF IFKYSAKTGL TKLIDASRVS ETEYSALEQN AK	Homo sapiens
				atccccgctag aatccgtcca gtctctgctc gcgcaccgtg acttctaagg ggcgcggatt A tcagccgagc tgttttcgcc tctcagttgc agcagagaag cccctggcac ccgactctat ccaccacacg gaagcctccc aaaagagctc tcgcccctgtg gacgactcgg aatccctgga aaagccggga gggagtcgga ggcgccagcc cactggctgg gtggcgctgg gcgcgcggga tgccgcgggg gccttctctg caggagccgc acagtgcact gctgcgcgt gggcagtgcg gggaagcgcc gcgggaagga ggcgctccga gcaacaggtg cagcacgcag ccgtcccggg agccaggga aaccgcccgc gaagatctgg agcgtaagg cggagagaa ggtctttcca cctgcgggc tgcagccggc ggatccctct tcccaggctc cgtggtcgc cagcggcgcg aggcgccgg gcaggggacc ccagtgtct cagatcacc gtccctccc gagaaggtcc agtcgcgggc tcccgaacc accctctctc agaaggtgc ggcgaaaaga cgttgccacc aggcacggc accggatccc cgtcccgct gctccgcgc tcgggggaag ctcagactcc taaaactgca ctctccgtg tttgcgcgg gacccctgg caccctgctc gctgctatc ccgcctccc tcccgcggc cccgcgcgt cgcgggaca gcccgcggt ccctggagct ggcggtcggg aacctcagc agggcaacgc gactggccg gagcccccg ccccgagcc cggcgctgt ttcggcatcg gcgtggagaa ctctgctcag ctggtggtgt tcggcctgat cttcgcgtg ggcgtgctg gcaacagcct agtgatcac gtgctggcg gcagcaagcc gggcaagccg cggagcacca ccaacctgtt catcctcac ctgagcatcg ccgacctggc ctacctgtc tctgcatcc cctccaggc caccgtgtac gcgtgcccc cctgggtgct ggcgccctc atctgcaagt tcatccacta ctcttccac gtgtccatgc tggtagagat cttcacctg gccgcgatg ccgtggaccg ctactggcc ctactgcatc cgcggcgctc ctctccctc aggtgtccc gcaacgcgt gctgggctg gctgcatct ggcgctgtc cattgcatg gcccgccc tggcctacca ccaggccctc tccaccgc gcgcagcaa ccagacctc tgcgggagc agtggcccga cctcgccac aagaaggcct acgtgggtgtg caccttcgtc ttcggctacc tgcgtccgt cctgctcctc tgcttctgt atgccaaggt ccttaatcac ttgcataaa agttgaagaa catgtcaag aagtctgaag catccaagaa aaagactgca cagacagttc tgggtgtgtt tgtgtgtgtt ggaatctcct ggcgtccgca ccacatcac catctcggg ctgagtttgg agtttcccg ctgacgcgg cttcctcct cttcagaac accgcccact gccggcgta cagcaattcc tccgtgaatc ctatcattta tgcaattctc tctgaaaatt tcagggaagg ctataaaca gtgttcaagt gtcacattcg caaagattca cactgagtg atactaaa gataaaaagt aaataaaagt cgaatagaca cccaccatc aaccaattgt actcatgtgt gataaaagt agagtatcct tatggttgag ttccatata agtggaccag acacagaaac aaacagaatg agctagtaag cgatgctgca acttgtatc ttaacaagaa ttcaagtcgt ttttaattaa tcccacgtgt gttaaaaagt actttgatcc atttaggaaa ttcctaggtc tagtgagaat tatttttcaa ttttatttta gttctaaatt atgtttcaga acaaaaagac aatgctgtac agttttatc ctcttcagac atgaaggga acatatatat tccatatata tgttcaactc ttcataagtt gtgaactggc ccataatgat ggtcagggaat atttgcagtc tacattttta agccaattta tttagaaaa aaatttgagc tttaattctt taattttaag agaagtaata ttgtgaacta tgtattttta aatatgatca tggacacaca atgatgaatt ttttgccat ttacatagac atatctatta agtggaaaga	



126	1762	Galanin Receptor GalR1	NP_001471.1	aggttttctg aagtctgttt gcacaggttg catttgctt caattgtagc tagcgacacag agcttttgaa gcctgtcatt atgagataca gtccgtttac ctcaggagtc aattcagtgt tgtactggtg acctgggatg cagtagtagg cactgttgat tcaaatattat cctgtgaac tggttttata gagttaacaa acagagtgca gagaccattg tcttaacagt ggaagatgca ataaagtgtt tgagaataaa acctgattt gaaattctt attagtactt gacaaagt ttcattttgc ctgtgaatga acctactaaa agagagatg aaaaaaatc agcaggttg atgtagataa taatttctat gggaccataa actagacaga attcagtaag tcacatgaag taatggtcat gcctgtacat aaagcataat tcatgtttga tttagatgac attcaaaaa aatcatggga ctgaatatac ctggggtatc ctatcttgta caaatgcagt cttttcatt aaatttgtaa tgatgtttaa tgaacatttc caccataatc tatttcctct aaaaatgta atttggggtt aaaccatca ccatttgaat ttcaaatgta gttttcatga caattttata ttgatgtgtg ttacaatga gaaatggca tgaaaatatt aaattgtctt gtatcg MELAVGNLSE GNASWPEPPA PEPGLFGIG VEFVTLVVF GLIFALGVLG NSLVTVLAR P SKPGKPRSTT NLFILNLSIA DLAYLLFCIP FOATVYALPT WVLGAFICKF IHYFFTVSML VSIFTLAAMS VDRYVAIVHS RRSLSLRVSR NALLGVGCIW ALSIAMASPV AYHQGLFHPR ASNQTFCEWQ WPDPRHKKAY VVCTFVGYL LPLLILICFCY AKVLNHLHKK LKNMSKKSEA SKKTAQTVL VVVVFGISW LPHHIIHLWA EFGVPLTPA SFLFRITAHK LAYSNSVNP IIYAFLENF RKAYKQVFKC HIRKDSHLSL TDENKSRIDT PPSTNCTHV ggcagcggtg gcaggggctg cagagcaag tgaccaggag caggactggg gacaggcctg A atcgccctcg cagcaaccag accttcgcc gccctcaga tgactacctc tccgatcctg cagctgctgc tgcgctctc actgtgcggg ctgctgctcc agaggcgga gacaggctct aaggggcaga cggcggggga gctgtaccag cgtggggaac ggtaccgcag ggagtgcag gagacctgg cagcgcgga accgcttca ggcctgcctc gtaacgggtc cctcgatag tacgtctgct gggactatgc tgcacccaat gccactgcc gtgctgctg cccctggtac ctgcccctgg accaccatgt ggtgcaggt tctgctctcc gccagtgtg cagtgtggc caatggggac ttggagaga ccatacaca ttgagagacc cagagaagaa tgaggcctt ctggaccaaa ggtcatctt ggagcggtg caggtcatgt acactgtcg ctactcctg tctctcgcca cactgtgct agcctgctc atcttgagt tgttcaggcg gctacattgc actagaaact atatccacat caactgttc acgtcttca tgcctgagc tgcggccatt ctagccgag accgtctgct acctgacct ggccttacc ttggggacca ggccttgcg ctgtggaac agccctcgc tgcctgcgc agggccaga tctgaccca gactgcgtg ggtgccact acacgtggct gctggtggag ggcgtctacc tgcacagtct cctggtgctc gtggaggct ccgaggagg ccacttcgc tactacctgc tccctggctg gggggcccc gcgttttgc tcatctctg ggtgatctc aggtacctgt acgagaacac gcagtgtg gagcgcaac aagtcaagg catttggtg attatacga ccccatctc catgaccatc ttgattaatt tctcatctt tatccgcat cttggcatt tccgtgccaa gctgaggaca cggcaaatgc gctgcggga ttaccgctg aggtggctc gctccagct gacgtggtg ccctgctgg gtgtccaca ggtggtgtt gctccgtga cagaggaca ggcggggg gcctgcgtc tcgccaagct cggctttgag atcttctca gctccttcca ggccttctg gtcagcgtc tctactgct catcaacaag gaggtgcagt cggagatccg ccgtggctgg caccactgcc gcctgcgcg cagcctggg caggagcaac gccagctccc ggagcgcc	Homo sapiens
127	1808	Gastric Inhibitory Polypeptide Receptor	NM_000164	ggcagcggtg gcaggggctg cagagcaag tgaccaggag caggactggg gacaggcctg A atcgccctcg cagcaaccag accttcgcc gccctcaga tgactacctc tccgatcctg cagctgctgc tgcgctctc actgtgcggg ctgctgctcc agaggcgga gacaggctct aaggggcaga cggcggggga gctgtaccag cgtggggaac ggtaccgcag ggagtgcag gagacctgg cagcgcgga accgcttca ggcctgcctc gtaacgggtc cctcgatag tacgtctgct gggactatgc tgcacccaat gccactgcc gtgctgctg cccctggtac ctgcccctgg accaccatgt ggtgcaggt tctgctctcc gccagtgtg cagtgtggc caatggggac ttggagaga ccatacaca ttgagagacc cagagaagaa tgaggcctt ctggaccaaa ggtcatctt ggagcggtg caggtcatgt acactgtcg ctactcctg tctctcgcca cactgtgct agcctgctc atcttgagt tgttcaggcg gctacattgc actagaaact atatccacat caactgttc acgtcttca tgcctgagc tgcggccatt ctagccgag accgtctgct acctgacct ggccttacc ttggggacca ggccttgcg ctgtggaac agccctcgc tgcctgcgc agggccaga tctgaccca gactgcgtg ggtgccact acacgtggct gctggtggag ggcgtctacc tgcacagtct cctggtgctc gtggaggct ccgaggagg ccacttcgc tactacctgc tccctggctg gggggcccc gcgttttgc tcatctctg ggtgatctc aggtacctgt acgagaacac gcagtgtg gagcgcaac aagtcaagg catttggtg attatacga ccccatctc catgaccatc ttgattaatt tctcatctt tatccgcat cttggcatt tccgtgccaa gctgaggaca cggcaaatgc gctgcggga ttaccgctg aggtggctc gctccagct gacgtggtg ccctgctgg gtgtccaca ggtggtgtt gctccgtga cagaggaca ggcggggg gcctgcgtc tcgccaagct cggctttgag atcttctca gctccttcca ggccttctg gtcagcgtc tctactgct catcaacaag gaggtgcagt cggagatccg ccgtggctgg caccactgcc gcctgcgcg cagcctggg caggagcaac gccagctccc ggagcgcc	Homo sapiens

128	1808	Gastric Inhibitory Polypeptide Receptor	NP_000155.1	<p> tccggggccc tgcctccgg ctcggggccc ggcgagggtcc ccaccagccc cggcttggtcc  tcggggaccc tcccaggccc tgggaatgag gccagccggg agttggaag ttactgtctag  ggggcgggat ccccggtct gtccagttag catggattta ttgagtcca actcgtgcc  agggccagta cggaggacgc tgggaaatg gtgaaggaaa cagaaaaag gtcctgccc  ttctggagat gacaaactgag tgggaaaaac agaccgtgaa cacaaaaat caagtccac  acacgtatg gaatggtat gaaggaaagc gagaaagggg cctagggtgg cttgggaggc  gtctccaaag aggtgacact taagccatcc ccgaaagagg tgaagagat cactttggg  agagctggag aacaggttc taggcggaag cgatagcata ggcaaggcc cttgggcagg  aaggcgctca gccttggtg gagtagaatt aagtcagagc caacaggttg gggagagaca  gagaagtggg caggggcacc caagttggga ttctattca ggtgcattgg agattcttag  gagtgctct tgggggtaatt atttatttt ttaaaaaatg aggat </p>	Homo sapiens
129	1813	Gastrin- Releasing Peptide Receptor	NM_005314	<p> CNGSFDMYVC WDYAAPNATA RASCPWYLPW HHVAAAGFVL RQCGSDGQWG LWRDHTQCEN  PEKNEAFLDQ RLILERLQVM YTVGYSLSLA TLLALLLILS LFRRLHCTRN YIHINLFTSF  MLRAAAILSR DRLLPRPGPY LGDQALALWN QALAACRTAQ IVTQYCVGAN YTWLIVEGVY  LHSLLVVGG SEEGHFRYYL LLGWGAPALF VIPWVIVRYL YENTQCWERN EVKAIWIIIR  TPILMTILIN FLIFIRILGI LLSKLRTROM RCRDYRLRLA RSTLTLPVLL GVHEVVFAPV  TEEQARGALR FAKLGFEIFL SSFQGLVSV LYCFINKEVQ SEIRRGWHHC RLRLSGEEQ  ROLPERAFRA LPSGSGPGEV PTERGLSSGT LPGPNEASR ELESYC </p>	Homo sapiens
129	1813	Gastrin- Releasing Peptide Receptor	NM_005314	<p> ccagattcta aatatacagga aagacgctgt gggaaaaatag caggccaaaa gtcttagta A  aactgcagcc agggagactc agactagaat ggaggtagaa agaactgatg cagagtgggt  ttaattctaa gcctttttgt gctaagtgt ttgtgtttgta aacttattga atttagagtt  gtattgcact ggtcatgtga aagccagagc agcaccagtg tcaaaatagt gacagagagt  tttgaatacc atagttagta tatatgtact cagagtattt ttattaaaga aggcaaaagag  ccgggcatag atcttatct catcttcaact cggttgcaaa atcaaatagt aagaaatagc  atctaaggga acttttaggt gggaaaaaaa atctagagat ggctctaaat gactgtttcc  ttctgaactt ggaggtggac cattcatgc actgcaacat ctccagtcac agtgcggatc  tcccgtgaa cgatgactgg tcccaccgg ggatcctcta tgtcatcctt gcagtttatg  gggttatcat tctgataggc ctcaattggca acatcaactt gatcaagatc ttctgtacag  tcaagtccat gcgaaacgtt ccaaacctgt tcatttccag tctggctttg ggagacctgc  tctcctaact aacgtgtgct ccagtggtat ccagcaggta cctggctgac agatggctat  ttggcaggat tggctgcaaa ctgattcccct ttatacagct tacctctgtt ggggtgtctg  tcttcaact cagggcgctc tcggcagaca gataaaagc catgtcccg ccaatggata  tccaggctc ccatgcccgt atgaagatct gcctcaagc cgcctttatc tggatcatct  ccatgctgct ggccattcca gaggccgtgt ttctgacct ccatcccttc catgaggaaa  gcaccaacca gaccttcat agctgtgccc catacccaca ctctaatag cttcacccca  aaatccattc tatggcttc ttctgtgtc tctacgtcat cccactgtcg atcatctctg  tttactacta cttcattgct aaaaatctga tccagtgctg ttacaatctt cccgtggaaag  ggaatatata tgtcaagaag cagattgaat cccggaagcg acttgccaag acagtgtctg  tgtttggtgg cctgttcgct tctgtgtggc tccccaatca tgtcatctac ctgtaccgct  cctaccata ctctgaggtg gacacctcca tgtccactt tgtcaccagc atctgtgccc </p>	Homo sapiens

130	1813	Gastrin-Releasing Peptide Receptor	NP_005305.1	gctctcctggc cttcaccaac tctgcgtga accctttgc cctctacctg ctgagcaaga gtttcaggaa acagttcaac actcagctgc tctgttgcca gcctggcctg atcatcgggt ctacagcac tgaagagagt acaacctgca tgacctccct caagagtacc aacctctcgg tggccacctt tagcctcatc aatggaaca tctgtcacga gcgtatgtc tagattgacc cttgattttg cccctgagg gacggttttg ctttatgctt agacaggaac ccttgcatcc attgttgtgt cctgtgccctc caaagagcct tcagaatgct cctgagtgtt gtaggtgggg gtggggaggc ccaaatgatg gatcacatt atatttgaa agaagc	ILIGLIGNIT P	Homo sapiens
				LIKIFCTVKS MRNVNLFIS SLALGDLILL ITCAPVDASR YLADRWLFGR IGCKLIPFIQ LTSVGVSFT LTALSADRYK AIVRPMDIQA SHALMKICKL AAFIWIISML LAIPEAVFSD LHPFHEESTN QTFISCAPYP HSNEHPKIH SMASFLVEYV IPLSIISVY YFIAKNLIQS AYNLPVEGNI HVKKQIESRK RLAKTVLVFV GLFAFCWLPN HVIYLYRSYH YSEVDTSM LH FVTSICARLL AFTNSCVNPF ALYLLSKSFR KQFNTQLLCC QPGLIIRSHS TGRSTTCMTS LKSTNPSVAT FSLINGNICH ERYV		
131	1814	Cholecystokin nin B Receptor	NM_000731	atggagctgc tcaagctgaa cggagcgtg cagggaaacc gaccgggccc gggggcctcc A ctgtgcgcc cggggggccc tctctcaac agcagcagtg tgggcaacct cagctggag cccctcgca ttgcgggagc cgggacacga gaattggagc tggccattag aatcactctt taagcagtga tcttctctgat gagcgttggg gaaaatatgc tcatcatcgt ggtcctggga ctgagccgcc gcctgaggac tgtcaccaat gccttctcc tctcactggc agtcagcgac ctctgctgg ctgtggcttg catgccttc accctctgc cgaatctcat gggcacattc attcttggca cgtcatctg caaggcgtt tctactcca tgggggtgtc tgtgagtgtg tccacgctaa gcctcgtggc catgcactg gagcgtgaca gcgccatctg ccgaccactg caggcacgag tgtggcagac gcgtccccc cgggctcgcg tgattgtag cactgggctg ctgtccggac tactcatggt gccctacccc gtgtacactg tctgtcaacc agtggggcct cgtgtcctgc agtgcgtgca tgcgtggccc agtgcgggg tccgccagac ctggtccgta ctgctgcttc tgcctttgtt cttcatcccc ggtgtggtta tggccgtggc ctacgggctt atctctcgg agctctactt agggcttcgc tttgacggcg acagtgcag cgacagccaa agcagggtcc gaaaccaagg cgggctgcca ggggctgttc accagaaagg gcgttgccgg cctgagactg gcgcggttgg cgaagacagc gatggctgct acgtgcaact tccagctcc cggcctgccc tggagctgac ggcgtgacg gctccagggc cgggatccgg ctcccggccc acccaggcca agctgctggc taagaagcgc gtggtgcgaa tgttctgtgt gatcgtgtg ctttttttc tgtgttgggt gccagttaa agtgccaaca cgtggcgcg cttgatggc cgggtgcaac accgagcaat ctgggtgtgt cctatctctt tcatctactt gctgagctac gcctcgccct gtgtcaacc cctgtgtctac tgcttcacg accgtcgctt tcccgaggcc tgcctggaaa cttgcgctcg ctgctgcccc cggcctccac gagctcgccc cagggtctt cccgatgagg accctccac tccctccatt gcttgcgtt ccaggcttag ctacaccacc atcagcacac tgggcccctg ctgaggagta gaggggctgt gggggttgag gcaggggcaaa tgacatgcac tgaccttcc agacatagaa aacacaaacc acaactgaca caggaaccaa acacccaaag catggactaa ccccaacgac agggaaaagt agcttacctg acacaagagg aataagaatg gagcagtaca tgggaaagga ggcattgcctc tgatatgga ctgagcctgg cccatagaaa catgacactg accttgaga gacacagcgt ccctagcagt gaactatttc	A	Homo sapiens

132	1814	Cholecystokin nin B Receptor	NP_000722.1	<p> taccacagtgg gaactctgac aagggtgac ctgcctctca cacacataga ttaatggcac  tgattgtttt agagactatg gagcctggca caggactgac tctgggatgc tctagtttg  acctcacagt gaccttccc aatcagcact gaaaatacca tcaggccctaa tctcatacct  ctgaccaaca ggctgttctg cactgaaaag gtcttctatc cctttccagt taaggaccgt  ggcctgccc tctccttctt tcccaaaactg tccaagaaat aataaatgtg ttggcttctt  cctgaaaaaa aaaaaaaa aaaaaaaa aggaattcc  MELLKLNRSV QGTGPGPGAS LCRPGAPLIN SSSVGNLSCE PPRIAGAGTR ELELAIRITL P  YAVIFLMSVG GNMLIIIVLG LSRRLRTVTN AFLLSLAVSD LLLAVACMPF TLLPNLMGTF  IFGTVICRAV SYLMGVSVSV STLSLVAIAL ERYSAICRPL QARVWQTRSH AARVIVATWL  LSGLLMVPYP VYTVVQPVGP RVLQCVRHP SARVRQTWSV LLLLLFFIP GVVMAVAYGL  ISRELYLGLR FDGSDSDSQ SRVRNQGGLP GAVHQNGRCR PETGAVGEDS DGCYVQLPRS  RPALELTALT APGPGSGSRP TQAKLLAKKR VVRMLLVIVV LFFLCWLPVY SANTWRAFDG  PGAHRALSQA PISFIHLISY ASACVNPLVY CFMHRFRQA CLETCARCCP RPPRAPPRAL  PDEDPPTPSI ASLSRLSYTT ISTLPGP </p>	Homo sapiens
133	1834	Glucagon Receptor	NM_000160	<p> ggatctggca gcgcgcgcaa gacgagcggg caccggcgcc cgaccggagc gcgccagag A  gacggcgggg agccaagcgg accccggagc agcgccggc ggccctgag gctcaagggg  gcagcttcag gggaggacac cccactggcc aggacgccc aggtctgtct gctctgccac  tcagctgccc tcggaggagc gtacacacac accaggactg cattgcccc gtgtgcagcc  cctgccagat gtgggaggca gctagctgcc cagaggcatg cccccctgcc agccacagcg  acctctgtg ctgtgtctgc tctgtctggc ctccaggcca caggtccctt ccgtcaggt  gatggacttc ctgtttgaga agtggaaagt ctacggtgac caggtgcacc acaacctgag  cctgctgccc cctccacagg agctggtgtg caacagaacc ttcgacaagt attcctgtctg  gccggacacc cccgccata ccaaggccaa catctcctgc ccttggtacc tgcctggga  ccacaaaagt caacaccgt tctgtgttcaa gagatgcggg ccgacgggtc agtgggtgcg  tggaaccccg gggcagcctt ggcgtgatgc ctcccagtc cagatggatg gcgagagat  tgagggtccag aaggaggtgg ccaagatgta cagcagcttc caggtgatgt acacagtggg  ctacagcctg tccctggggg cctgtctct cgccttgccc atcctggggg gctcagcaa  gctgcactgc acccgcaatg ccatccacgc gaatctgttt gcgtccttgc tctgaaaagc  cagctccgtg ctggtcattg atgggctgct caggacccgc tacagccaga aaattggcga  cgacctcagt gtcagcacct ggcctcagtga tggagcgggtg gctggctgcc gtgtggccgc  ggtgttcattg caatatggca tctgtggccaa ctactgctgg ctgctggtgg agggcctgta  cctgcacaaac ctgctggggc tggccacctt ccccgagagg agcttcttca gctctacct  gggcatcggc tgggggtgcc ccatgtgttt cgtcgtcccc tgggcagtggt tcaagtgtct  gttcgagaac gtccagtgtt ggaccagcaa tgacaacatg ggcttctggt ggatcctgcg  gttccccgtc ttcctggcca tcttgatcaa ctcttcac ttcgtccgca tctgtcagct  gctcgtggcc aagctgcggg cactggcagat gcaccacaa gactacaagt tccggctggc  caagtccacg ctgacctca tccctctgct ggcgttcac gaagtgtct tgccttctgt  gacggacgag cagccccagg gcacctgctg cctccgcaag ctcttcttgc acctcttct  cagctccttc cagggcctgc tgggtgctgt cctctactgc ttcctcaaca aggaggtgca  gtcggagctg cggcggcgtt ggcaccgtg gcgcctgggc aaagtgtat gggaggagcg  gaacaccagc accacaggg cctcatcttc gccgggccac ggccctccca gcaaggagct </p>	Homo sapiens

134	1834	Glucagon Receptor	NP_000151.1	<p>gagatttggg aggggtggtg gcagccagga tcatctctg gagacccct tggctggtg</p> <p>cctccctaga ttggtgaga gccctcttg aacctctg gaccccgag taggctgga</p> <p>ctctggcacc cagagcgctc gctggacaac ccagaaactg acgcccagct gaggtggg</p> <p>gcggggagc caacagcgc cccacctac cccccccc cagtgtggt gctgagaga</p> <p>ttgggacctc tctccctgc cctgcttgc cctgggtga gagtgagca gagagtcga</p> <p>ggcgggagt ggggctgtg ccgtgaactg cgtgccagt tccccacga tgtcggcacg</p> <p>tcccatgtc atgaaatgt cctccaaca taaagagctc aagtgtcac cgtg</p> <p>MPPCQPQRL LLLLLLLAC PQVPSAQVMD FLFEKWLKYG DQCHNLSSL PPTELVCNR P</p> <p>TFDKYSCWPD TPANTTANIS CPWLPWHHK VQHRVFVRC GPDGQWVRG RGQWRDASQ</p> <p>QMDGEEIEV QKEVAKMYSS FQVMYTVGYS LSLGALLAL AILGLSKLH CTRNAIHANL</p> <p>FASFVLKASS VLVIDGLLRT RYSQKIGDDL SVSTWLSDGA VAGCRVAVF MQYGIVANYC</p> <p>WLLVEGLYLH NLLGLATLPE RSFSLYLGI GWGAPMLFV FWAVVKCLFE NVQCWTSNDN</p> <p>MGFWWILRFP VFLAILINFF IFVRIVQLLV AKLRAROMHH TDYKFERLAKS TLTPLLLGV</p> <p>HEVVFVFTD EHAQGLRSA KLFFDLFLSS FQGLLVAVLY CFLNKEVQSE LRRWRHWRRL</p> <p>GKVLWEERNL SNHRASSPG HGPPSKELQF GRGGGSQDSS AETPLAGGLP RLAEPPF</p>	Homo sapiens
135	1925	Gonadotropin -Releasing Hormone Receptor	NM_000406	<p>ttggtgtgtg gtccacttac aacactttt catatttga tgtctttcca atggttatcc A</p> <p>tgttttgttc atttcaggca tatggccctg atcagattaa ctgacatgat gtatatgcaa</p> <p>agccttttga gttcttcaga aaaaataatt atcttattca agactgattg cttataagga</p> <p>acttattata gctaataatg taggcacaa tttttttgta attctcctag atgagtcaga</p> <p>acttagtttt gatgtaggta aaaaattttat ggtcacaaat ctccaggtgtg agaaaatctc</p> <p>tttcccttgat actctatata aatagaggat atcaaatatt caagtctgga agtagtgaga</p> <p>gaagctggta attctggaca tatagtga caaaaaagg agctcaggga caggactggt</p> <p>ctaagctgct caagattcag gagacagcca gtacacagag agctgagga aataatacag</p> <p>atatactaa aacacttctc taaccttctg tggtaacaag ctcttaaa gggctggatg</p> <p>atgttgtgtt cactttttat caccagcaaa ggctaagata atgtatatag taaatatta</p> <p>gtaaccattt attaaataaa taaatattta agacagata acaagata ataaatgaac</p> <p>caataagaat gcaccatcta agtcaaaaa gccactttta tccctaacat tgtacctgct</p> <p>ttggctgctg cagaagcaaa cttgttgga ttagacaaat caagctggtg atttaataaa</p> <p>ttccaatgta agtcttacc agtcttacc ataactatcc agcactcacc atgaaagtta</p> <p>agaaagcaac acagaaaaag ttctaagtg gtcccaattt gaaatgatca gataacctat</p> <p>aaaagaacat attcatatta tactaacata aacacataa atgcactta cagcagttac</p> <p>acagtattct cttcaataac tagtttctt atgcattaat gtgtaataac agcaactaca</p> <p>atatttagat aattataaaa accaaggcaa taatttaaaa actgattaac cgtttactc</p> <p>taacttaagc atggattgga tcagtaagat tgattataaa attgaaatgc agtcagttgg</p> <p>attgattcta atttaaggtt ttaatttgtt gtagaataat tttaagtga tatattgtc</p> <p>cagtgttcca gtgctcaaca gtgtgttga aaagaaaaa aaagaatgtt ttgagaatgt</p> <p>gttaattcct taagacaatg gattttaatt ggactgtgtg ttttcatttt tcttcattat</p> <p>cattatacat ctgtatgttg gacagaacac taacactaaa tagtttttag aaagtgtttt</p> <p>ttgaagttaa ttaaatcata atatcatgac tgacttttga attcaaaaatt aggtgtgac</p> <p>tatccttctt cacttaggaa gagtgtgtg aaagccagac catctgctga ggtgctacacg</p> <p>ttacatgtgg ccctcagaat gcgtttggcc tgctctgttt tagcactctg ttggattacc</p>	Homo sapiens

136	1925	Gonadotropin NP_000397.1 -Releasing Hormone Receptor	<p> aatacacaaa acaaggttaac ctttgatctt tcacattaag tatctcaggg acaaaatttg  acatacgtct aaacctgtga cgtttccatc taaagaaggc agaaataaaa catggacttt  agattcgggt acaataaaat atcagatgca ccagagacac aaggcttgaa gctctgtcct  gggaaaatat ggcaaacagt gctctcctg accaacaatc aaatcaatgt tcagccatca  aacaacagat cccactgatg cagggaaccc tccccactct gaccttgctt ggaagatcc  gagtacggt tactttcttc cttttctgc tctctgcgac tcttaatgct tctttctgt  tgaaccttca gaagtggaca cagaagaaag agaaaggga aagctctca agaataagc  tgctcttaaa acatctgacc ttagccaacc ttgtggagac tctgattgtc atgccactgg  atgggatgtg gaacattaca gtccaatggt atgctggaga gttactctgc aaagtctca  gttatctaaa gctttctcc atgtatgcc cagccttcac gatggtggtg atcagcctgg  accgctccct ggctatcacg aggcacctag ctttgaagg caacagcaaa gtggacagt  ccatggttgg cctggcctgg atcctcagta gtgtcttgc aggaccacag ttatacatct  tcaggatgat tcatctagca gacagctctg gacagacaaa agttttctct caatgtgtaa  cacactgcag tttttcaca tgggtggcatc aagcatttta taactttttc acctcagct  gcctcttcac catccctctt ttcatcatgc tgatctgcaa tgcaaaaatc atctcaccc  tgacacgggt ccttcacag gaccccaag aactacaact gaatcagtc aagaacaata  taccagagc aggctgaag actctaaaaa tgacggttgc atttgccact tcattactg  tctgtggac tccctactat gtcctaggaa tttggtattg gtttgatcct gaaatgttaa  acaggtgtgc agaccagta aatcattct tctttctct tgccttttta aaccatgct  ttgatccact tatcttctc tctgtga </p>	Homo sapiens
137	1945	Opsin, green-sensitive	<p> atggcccagc agtgagcct ccaaggctc gcaggccgcc atccgcagga cagctatgag A  gacagcacc agtcacagcat ctteacctac accaacagca actccaccag agccccttc  gaaggccga attaccacat cgtccacga tgggtgtacc acctaccag tgtctggatg  atctttgtg tcatgcatc cgtttcaca aatgggcttg tgctggcggc caccatgaag  ttcaagaagc tgcgccacc gctgaactgg atcctgggtga acctggcgtt cgtgacctg  gcagagaccg tcatgccag cactatcagc gttgtgaacc aggtctatgg ctactctgtg  ctgggccacc ctatgtgtgt cctggagggc tacacctct cctgtgtgtg gatcacaggt  ctctgtctc tggccatcat tctctgggag agatggatgg tggcttgcaa gcccttggc  aatgtgagat ttgatgcaa gctggccatc gtgggcatg ccttctcctg gatctggct  gctgtgtgga cagccccgc catctttggt tggagcaggt actggcccca cgccctgaag  acttcagcg gccagacgt gttcagcggc agctgtacc ccggggtgca gcttcatg  attgtctca tggtaacctg ctgcatcacc cactcagca tcatcgtgtc ctgtaacctc  caagtgtgc tggccatccg agcgtggga aagcagcaga aagagtctga atccaccag  aaggcagaga aggaagtgc gcgatggtg gtggtgattg tctggcatt ctgctctgc  tggggaccat acgctctct cgcgtgctt gctgctgca acctggcta cccctccac </p>	Homo sapiens

138	1945	Opsin, green- sensitive	NP_000504.1	MAQWLSLQRL AGRHPQDSYE DSTQSSIFTY TNSNSTRGPF EGPNYHIAPR WYHLTSVWM P IFVVIASVET NGLVLAATMK FKLRLHPLNW ILVNLAVADL AETVIASTIS VVQVYGYFV LGHPMCVLEG YTVSLCGITG LMSLAISWE RWMVVCPRFG NVRFDAKLAI VGIAFSWIWA AVWTAPPIFG WSRYPHGLK TSCGPDVFSG SSYPGVQSYM IIVMTCCIT PLSIIVLCYL QVWLAIKRAVA KQKSESTQ KAEKEVTRMV VVMVLAFCFC WGPYAFFACF AAANPGYPFH PLMAALPAFF AKSATIYNPV IYVFMNRQFR NCILQLFGKK VDDGSELSSA SKTEVSSVSS VSPA	Homo sapiens
139	1951	Growth Hormone Secretagogue Receptor	NM_004122	atgtggaacg cgacgcccag cgaagagccg gggttcaacc tcacactggc cgacctggac A tggtatgctt ccccgccgaa cgactcgctg ggcgacgagc tgctgcagct cttccccgcg ccgctgctgg cggcgctcac agccacctgc gtggcactct tcgtggtggg tatcgctggc aacctgctca ccatgctggt ggtgtcgcg tcgcgcagc tgcgacacac caccacactc tacctgtcca gcatggcctt ctccgatctg ctcatcttcc tctgcatgcc cctggacctc gttcgctctt ggcagtaccg gccctggaac ttccggcacc tctctgcaa actcttccaa ttcgtcagtg agagctgcac ctacgccacg gtgctcacca tcacagcgt gagcgtcgag cgctacttcg ccatctgctt ccactcccg gccaaagtggt tggtcaccaa gggcggggtg aagctggtca tcttcgtcat ctgggcccgt gcccttgca gcgccgggc catcttctgt ctagtcgggg tggagcacga gaacggcacc gaccttggg acacacaga gtgccgcccc accgagtttg cggctgcctc tggactgctc acggtcagtc tgtgggtgtc cagcacttct ttcttcctc ctgtctctg tctcacggtc ctctacagtc tcatcggcag gaagctgttg cggaggagc ggcgcgatgc tgcgtgggt gccctgcga gggaccagaa ccacaagcaa accgtgaaa tgcgtgggtg gtctcagcgc gcgtcagc tttctctcgc ggtcctctatc ctctccctgt gccttctccc tctctctga	Homo sapiens
140	1951	Growth Hormone Secretagogue Receptor	NP_004113.1	MWNATPSEEP GENLTADLD WDA SPGNDL GDELLQLFPA PLLAGVTATC VALFVVGIAG P NLLTMLVVSF RELRTTNL YLSSMAFSDL LIFLCMPIDL VRLMQYRPWN FGDLCKLFQ FVSECTYAT VLTITALSVE RYFAICFPLR AKVVTGKRV KLIVFVIWAV AFCSAGPIFV LVGVEHENT DPWDNECRP TEFAVRSGLL TMMVWVSSIF FFLPVFCLTV LYSLIGRKIW RRRRGDVVG ASLRDQNHQ TVKMLGGSQR ALRLSLAGPI LSLCLLPSL	Homo sapiens
141	1954	Growth Hormone- Releasing Hormone Receptor	NM_000823	agcagccaag gcttactgag gctggtggag ggagccactg ctgggctcac catggaccgc A cggatgtggg gggcccacgt cttctgcgtg ttgagccgtg taccgaccgt attggggccac atgcacccag aatgtgactt catcacccag ctgagagagg atgagatgc ctgtctacaa gcagcagagg agatgcccac caccaccctg ggctgcccctg cgacctggga tgggctgctg tgctggccaa cggcaggctc tggcagagtgg gtcacccctc cctgcccga tttctctct cacttcagct cagagtcagg ggcgtgaaa cgggattgta ctatcactgg ctggtctgag ccctttccac cttaccctgt ggctgcccct gtgcctctgg agctgctggc tgaggaggaa tcttacttct ccacagtgaa gattatctac accgtgggccc atagcatctc tattgtagcc ctcttcgtgg ccatcaccat cctggttgct ctcaggaggg tccactgccc cggaaactac gtccacaccc agctgttcac cactttatc ctcaaaggcgg gacgtgtgtt cctgaaggat	Homo sapiens

142	1954	Growth Hormone- Releasing Hormone Receptor	NP_000814.1	<p>gctgcccctt tccacagcga cgaactgac cactgcagct tctccactgt tctatgcaag gtctctgtgg ccgcctccca ttctgccacc atgaccaact tcagctggct gttagcagaa gccgtctacc tgaactgctt cctggcctcc accctcccca gtgtcttcca cgtcaaggag agccttctgg tggctggttc tcgtggttg gggcctgccc ggtgtcttga ggtgcacgtg ggtgagctgc aaactggcct tcgaggacat cgcgtgctgg gacctggagc acacctcccc ctaactggtg atcatcaaa gggccattgt cctctcggtc ggggtgaact ttgggctttt tctcaatatt atccgcatcc tggtaggaa actggagcca cgtcagggca gccctccatac ccagctctcag tattggcgtc tctccaagtc gaccttttc ctgacctccac tctttggaat tcaactacac atcttcaact tctgcccaga caatgctggc ctgggcatcc gctccccct ggagctggga ctgggttctt tccagggtt cattgttgc atctctact gcttctcaa ccaagaggtg aggactgaga tctcacggaa gtggcatggc catgacctg agcttctgcc agcctggagg accctgtcta agtgaccac gcttccccg tcggcggaat tgggcagcta ccacgggtct taggtgctt catcacgcca ctggagtcca cacttgaatt tgggcagcta ccacgggtct gccatgctt ggaggagcaa gggggccaca tccccacccc agctgttacc cagcccgggg caggtgcagc ccttctctcc tgtctctgca tctgactctc ttttgaggtc cctgtatgtc tacctctgac ttctgtgttc cctctgtgtc tgcctctcacc cacttctctt actggggcct gggctctag cccaaggctc agaggagcca ataaacctgt aaatgaaaaa aaaaaaa MDRRMWGAHV FCVLSPLPTV LGHMHPECDF ITQLREDESA CLQAAEEMPNTTLGCPATWD P GLLCWPTAGS GEWVTLPCPD FFSHESSESG AVKRDCITIG WSEPPFPYPV ACPVPLELLA EESYFSTVK IITYVGHSSS IVALFVAITI LVALRRLHCP RNYVHTQLFT TFIKAGRVF LKDAALFHS DTDHCSFSTV LCKVSVAAASH FATMTNFSWL LAEAVYINCL LASTSPSRR AFWWLVLAGW GLPVLFTGTW VSCKLAFEDI ACWDLDDTSP LWIWKPIV LSVGVNFGFLF LNIIRILVRK LEPAQGLSHT QSQYWRLSKS TLFLIPLFGI HYIIFNLPD NAGLGIRLPL ELGLGSFQGF IVALLYCFLN QEVRTFISRK WHGHDPPELLP AWRTRAKWTT PPSRAAKVLT SMC</p>	Homo sapiens
143	2120	Histamine H1 Receptor	NM_000861	<p>caggagagaca tacaggattt aagaagccca tcatggagaa gaccttcaat tacagagata A aaaagtttt ctgtggaac aagttaacac tagatggcag ataacagact gaggagtgag ctgcttctga ctcgattaaa aaggagtgga gccataaact gcggtgcttc ttccgcaat gagcctccc aattcctct cctctttaga agacaagatg tgtgaggga acaagaccac tatggccagc cccagctga tgccttggtt ggtggtcctg agcactatct gcttgggtcac agtagggctc aacctgctg tctgtatgc cgtacggagt gagcggaagc tccacactgt ggggaacctg tacatcgtca gccctcgggt ggcggacttg atcgtgggtg ccgtcgtcat gcctatgaac atcctctacc tctctatgtc caagtggta ctgggcccgtc ctctctgcct cttttggctt tccatggact atgtggccag cacagctcc attttcagtg tcttcatcct gtgcattgat cgctaccgt ctgtccagca gcccctcagg taccttaagt atcgtaccaa gacccagacc tcggccacca tctctggggc ctggtttctc tctttctgt gggttattcc cattctaggc tggaaatcact tcatgcagca gacctcgggt cgcgagagg acaagtgtga gacagacttc tatgatgtca cctgggttcaa ggtcatgact gccatcatca acttctacct gccacacttg ctcatgctct gttcttatgc caagatctac aagcccgtag gacaaactg ccagcacggg gagtcatca ataggtcctt cacttctctc tcagaaaata agctgaggcc agagaacccc aagggggatg ccaagaaacc agggaaggag tctccctggg aggttctgaa</p>	Homo sapiens



aaggaaagcca aaagatgctg gtgtggatc tgtcttgaag tcaccatccc aaacccccaa  
ggagatgaaa tccccagttg tcttcagcca agagatgat agagaagtag acaaacicta  
ctgctttcca cttgatattg tgcacatgca ggctgcggca gagggagta gcagggacta  
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caagaactgt tgcaatgaac atttgcacat gttcaccatc tggctgggct acatcaactc  
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atgtccaaca aggaataga ggacgaaggc ctgtgtgttg ccaggcaggc acctgggctt  
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acaaatgtcc ctcttaagt tgcaagata cacatacag gtattcccaa gagtgtggc  
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gaacatgtag ttttacttgg tgtttatgtt gcaattggtt tgtgatttat attttaaagc  
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144 2120 Histamine H1 NP\_000852.1 Receptor Homo sapiens

atgtttaaaa gcataactcta tgtgatttat ttattttctac tttttctgagt ctcttggaact  
 aagaagatgt tttgaaatgt accatcaaat gtttaacagag tttgatattgg gctttctctt  
 tggtttctca tcacatttgt aaatgtcttt tcaaaaggat ttactttttg taaaaagctt  
 cattctcact ctgctttgca tccccaaac ttctttgtca aaacgggggg agtttaggag  
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 agaagacctc cctgtgagag agtgcctct cagggtccct caggaccaa gaacactcga  
 aaagagcact tcacacagac aagtggctaa ggtccatta tttaccttga acaatcaagg  
 caactagtgg agagaactga ttgtgagctc  
 MSLPNSSCLL EDKCEGNKT TMASQMLPL VVVLSTICLV TVGLNLLVLY AVRSEKRLHT P  
 VGNLYIVSL VADLIVGAV MPNNIYLIM SKWSLGRPLC LFWLSMDYVA STASIFSVEI  
 LCIDRYRSVQ QPLRYLKRYT KTRASATILG AWFLSFLWVI PILGWNHFMQ QTSVRREDKC  
 ETDFYDVTWF KVMTAIINFY LPTLLMLWFY AKIYKAVRQH CQHRELINRS LPSFSEIKLR  
 PENPKGDAKK PGKESPWEVL KRPKPDAGGG SVLKSPSPVFS QEDDREVDKL  
 YCFPLDIVHM QAAAEGRSD YVAVNRSHGQ LKTDEQGLNT HGASEISEDQ MLGDSQSFSR  
 TDSDTTETA PGKGKLRSGS NTGLDYIKFT WKRLRSHSRQ YVSGLHMNRE RKAAKQLGFI  
 MAAFILCWIP YFIFFMVIAF CKNCCNEHLH MFTIWLGYIN STLNPLIYPL CNENFKKTFK  
 RILHRS

145 2121 Histamine H2 NM\_022304 Receptor Homo sapiens

ctctgacct ccactgactc cagagaggga gatccccagt acttgactcc atcacgcaga A  
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 atgacaccaa agccaccgcc agacagtgcc tcggaattcta tgcaaaacct gggaaagcga  
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 caacacctta gaaggtgttg cttaatttat ttctagaaaa gcagcccaga gtcagtcatt  
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 aagggcaatc ataccacctc taagtcaaa gtccaggta atgaagtga cgggctggtg  
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 aatgaggtgt tagaagccat cgttctgtgg ctgggctatg ccaactcagc cctgaacccc  
 atcctgtatg ctgcgctgaa cagagacttc cgcaccgggt accaacagct cttctgtgctg

146	2121	Histamine H2 Receptor	NP_071640.1	<p>aggctggcca accgcaactc ccacaaactc tctctgaggt ccaacgcctc tcaagtgtcc</p> <p>aggacccaaa gccgagaacc caggcaacag ccctgaagct ccaggtgtgg</p> <p>agtgggacag aagtcacggc ccccagggg gccacagaca ggtaatagcc cttagccattg</p> <p>gtcacagga tgggggcaat gggaggggat gctactgtat ggaatgatta agggagctgc</p> <p>tgcttagtg gtgctgtgtt atgttctagg aactcttcag gagcactttg taaacacctt</p> <p>cttgcttaac cctcccaacg gcccccaag gtagaactta gctccctttt aaaaggagca</p> <p>cattaaaatt ctacagagac ttggcaagg cgcacagct ggggcat</p>	Homo sapiens
147	2783	Opioid Receptor, kappa 1 (OPRK1)	NM_000912	<p>MAPNGTASSE CLDSTACKIT ITVVLAVLIL ITVAGNVVVC LAVGLNRRRLR NLTNCFIVSL P</p> <p>AITDLLLGLL VLPFSAIYQL SKWSFGKVF CNIYTSLDVM LCTASIIILF MISLDRYCAV</p> <p>MDPLRYPVLV TPVRVAISLV LIWVISITLS FLSIHLGWN SNETSKGNHT TSKCKVQVNE</p> <p>VYGLVDGLVT FYLPLLIMCI TYRIRFKVAR DQAKRINHIS SWKAATIREH KATVTILAAVM</p> <p>GAFIICWFPY FTAIFYRGLR GDDAINEVLE AIVLWLYAN SALNPILYAA LNRDFRTGYQ</p> <p>QLFCCRANR NSHKTSLRSN ASQLSRTQSR EPROQEEKPL KLQVWSGTEV TAPQATDR</p> <p>tgcagcactc accatggaat ccccgattca gatcttcgc ggggagcctg gccctacctg A</p> <p>cgccccgagc gctgcctgc ccccacacag cagcgccctg gggccgcgc acatctccc</p> <p>cgacagcaac ggcagcgccg gctcgagga gctccgtatg ttcgtcgtgg gcttggtggg</p> <p>ggccatcccg gtcacatca cggcggtcta ctcgtatg ttcgtcgtgg gcttggtggg</p> <p>caactcgtg gtcattgtcg tgatcatccg atacacaaa atgaagacag caaccaacat</p> <p>ttacatatat aacctggctt tggcagatgc ttagttact acaaccatgc cctttcagag</p> <p>tacggtctac ttgatgaat cctggccttt tggggatgtg ctgtgcaaga tagtaatttc</p> <p>cattgattac tacaacatgt tcaccagcat cttcaccttg accatgata gctgggaccg</p> <p>ctacattgcc gtgtgccacc ccgtgaaggc tttagacttc cgcacacctt tgaaggcaaa</p> <p>gatcatcaat atctgcatct gctgctgtc gtcactgtt ggcactctg caatagctct</p> <p>tggaggcacc aaagtcaggg aagacgtcga tgcattgag tgcctctgc agttccacaga</p> <p>tgatgactac tctgtgtggg acctcttcat gaagatctgc gcttctatct ttgcctctg</p> <p>gacccctgct ctcacatca tctgtctgta caccctgatg atcctgcgtc tcaagagcgt</p> <p>ccggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggatca ccagactggt</p> <p>cctggtgtg gtggcggtt tctgctgtg ctggactccc attcacatat tcatcctggt</p> <p>ggaggctctg gggagcacct cccacagcac agctgcttc tccagctatt acttctgcat</p> <p>cgcccttagc tataccaaca gtacctgaa tccattctc tacgcctttc ttgatgaaa</p> <p>cttcaagcgg tgttccggg acctctgctt tccactgaag atgaggatgg agcggcagag</p> <p>cactagcaga gtcgaaata cagttcagga tctgcttac ctgagggaca tcatgggat</p> <p>gaataaacca gtagactag tctgtagat gctctgtac ag</p>	Homo sapiens
148	2783	Opioid Receptor, kappa 1 (OPRK1)	NP_000903.1	<p>MESPIQIFRG EPGTCAPSA CLPPNSSAWF PGWAEPSDNG SAGSEDAQLE PAHISPAIPV P</p> <p>IITAVYSVVF VVGLVGNLSV MFVIRYTKM KTATNIYIFN LALADALVTT TMPFQSTVYL</p> <p>MNSWPFQDVL KIVISIDYY NMFTSIFTLT MMSVDRIYAV CHPVKALDFR TPLKAKINI</p> <p>CIWLLSSSVG ISAILVGGTK VREDVDVIEC SLQFFDDDDY WWDLFMKICV FIFAFVIVPL</p> <p>IIIVCYTILMI IRLKSVRLLS GSREKDRNLR RITRLIVIVV AVFVVCWTPI HIFILVEALG</p> <p>STSHSTAALS SYFICIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTSRV</p> <p>RNTVQDPAYL RDIDGMNKPV</p>	Homo sapiens
149	2964	Luteinizing	NM_000233	<p>ggccgccccat gaagcagcgg ttctcgccgc tgcagctgct gaagctgctg ctgctgctgc A</p>	Homo

Hormone/Chor  
iogonadotrop  
in Receptor

sapiens

agccgcgcgt gccacgagcg ctgcgcgagg cgctctgccc tgagccctgc aactgcgtgc  
ccgacggcgc cctgcgctgc ccgcgcgcga cgcgcggtct cactcgacta tcactgcct  
acctccctgt caaagtgtat ccatctcaag ctttcagagg acttaagtgc gtataaaaa  
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aattgcctatc aagagaaaac ttgtcaatc tccctggagg cactgtgact taccacagcc  
actgctgtgc ttttagaaa ttgccaaa ttgcaacaa aagaacagaa tttttcacat tccatttctg  
aaaacttttc caaacaatgt gaaagcacag taaggaaaag gagtaacaaa acactttatt  
cttccatgct tgctgagagt gaactgagt gctgggacta tgaatatggt ttctgtttac  
caaagacacc ccgattgtgt cctgaaccag atgcttttaa tccctgtgaa gacattatgg  
gctatgactt ccttagggtc ctgatttggc tgattaatat tctagccatc atgggaaaca  
tgactgttct tttgttctc ctgacaagtc gttacaaaact tacagtgcct cgttttctca  
tgtgcaatct ctcttttga gacttttga tggggtctca tctgctgctc atagcctcag  
ttgattccca aaccaaggcc cagtactata acatgaaagt agactggcag acaggggagt  
ggtgcagcac tctgtgcttt ttcactgtat tccgaagiga actttctctc tacacctca  
ccgtcatcac tctagaaa tgccacacca tccactatgc tattcacctg gaccaaaagc  
tgcgatttag acatgccatt ctgattatgc ttggaggagt gctcttttct tcttaattg  
ctatgttgcc ccttgtcggc gtacgcaatt acatgaaagt cagtatttgc tccccatgg  
atgtggaac cactctctca caagtctata tattaacct cctgattctc aatgtgggtg  
ccttcttcat aattgtgct tgcctacatta aaatttatt tgcagttcga aaccagaaat  
taatggctac caataaagat acaagattg ctaagaaaat ggcaatcctc atctcacccg  
atttcacctg catggcacct atctcttttt ttgccatctc agctgccttc aaagtacctc  
ttatcacagt acccaactct aaagttttac tggttctttt ttatccctc aattcttctg  
ccaatccatt tctgtatgca atattcacta agacattcca aagagatttc tttcttttgc  
tgagcaaat ttggtgctgt aaacgtcggg ctgaacttta tagaaggaaa gatttttcag  
cttacacctc caactgcaaa aatggcttca ctggatcaaa taagccttct caatccacct  
tgaagtgtc cacattgcac tgtcaaggta cagctctctc agacaagact cgtacacag  
agtgttaact gttacatcag taactgcatt attgaaatgt tcttaaacct gtaaaaaaaa  
attacctgta ccagtaatt taacataaag ggttggattt aggaattat ttatttttag  
gtacattagg caagagacct ctacctagta gaaagttag tctatgacca ctgcccacg  
taaaaaactat ttgtcattgt tacatggcat aaatatgaag ttgagagtgt ttgaaaattt  
ttatagaaat tttagacacg taattttgtt tgatgaatct tttaaaaaac agaggaggtta  
tttgcataat ctttttttca ttttcgtaat ttgtattgca tctataaaa atattagttc  
ataacagatc agaaatttaa aataaggggc ttttctctca ggtagttga aaaacacact



152	2976	Lysophosphat idic Acid Receptor Edg2	NP_001392.1	<p>gcatgaacc ccattcattta ctctaccgc gacaaagaaa tgagcgccac ctttaggcag  atcctctgct gccagcgag tgagaacccc accggcccca cagaaggctc agaccgctcg  gcttcctccc tcaaccacac catcttggtt ggagttcaca gcaatgacca ctctgtggtt  tagaacggaa actgagatga ggaacagcc gtcctctctt ggaggataaa cagcctccc  ctacccaatt gccagggcaa ggtggggtgt gtcagatgag aagagtcaac tcattgactt  aaacactaac caatgacagt atttgtctt ggacccaca agacttgata tataatgaaa  attagcttat gtgacaaccc tcattctgat cccatccct tctgaaaagta ggaagtggga  gctcttgcaa tgggaattcaa gaacagactc tggagtgtcc atttagacta cactaactag  acttttaaaa gatcttggtg ggtttggtgc agtcagaat aaattctggc tagttgaatc  cacaacttca ttatataca ggcctccctt ttttattttt aaaggatacg ttacacttaa  taaacacgtt tatgcctatc agcatgttg tgatggatga gactatggac tgcttttaaa  ctaccataat tccatttttt cctttacata ggaacactgt aagttggaat tatcttttgt  ttagaaagca tgcattgtaat gtatgtatgc agtatgctt acttaaaaaag attaaaggga  tactaatgtt aaatcttcta ggaatagaa ctagacttc aaagccagta tttgtttagg  tcatgaagca aacaatgctc taatcacaat attaactgtt taattaaaaa gttgtaacaa  gtataaaaca ggggaatgtaa gtttattacc aaagtgtat gtattccaaa aagtcataag  aagatgaagc actataatat tgttcccata tatttaaaat acccaagtac attctaatta  ccagtatatc agaggaaaat tttcgtagtc tttgtaaaat aatatactca tcatagaaaa  cttgaaaaat gcagaaatgt ataaaaagc aaaaatgatt actgataata tcacaaccca  gaagtaacca cctttaaaaa gcaaccccca tgtatgccta tatgtgtatt gtatactttt  tttacataat tggagtacata ctgtaaacag ttttataagt agatcttttt cattgcaaaa  ttgccacatt ttcttatggc attaaaaatt ttacaaaaac ataatttttaa tggctatatt  atattccatt taatggatgc aactcagitt atttaacccat tcccatgttg ttaactattt  aggtgtttc taattttcat tattataaag tgcagaaaat ttggtgt</p>	Homo sapiens
153	3038	G Protein- Coupled Receptor MRG	S78653	<p>ttttgtattt gttgcaccct agtctgttc atttctttt cctcagctga catttgagc A  atagcagtcg atgatgccc cagacacact gccagact cagccccctg gagaacgca  gatttcccta ttttccaggt caagtcctgc cagccataga aaggacttct ttggtgccc  ctgctgtgaa atgcctgctc tggaaatctc agtgcctcct tgtacctgtc tgagcccagg  gaaatgcaat actgtggcac tgcctgatcc tgcctgctga cccaaggatg cccagactg  gtttgaaaga gatgagacat gccagggtgc ttgtgctcag cttgtaatcc agcactttgg  gaggtcaagg cagtggatca caaggtcaga gttgagacca gccaggccaa tatggtgaaa  accccatctc tactaaaaat acaaaaaatt agccgggcaa tgggtggtggg tgctgtagt  tccagctagt caggaggccg aggcaggaga atcgcttgaa cctggaagggt ggaggttcca  gtgagctgag atcgcgccac tgcactccag cctgggtgac agagtgagac tccaactcaa</p>	Homo sapiens

Position	Sequence	Protein	Gene	Species
154	<p> aaaaaaaaa aaaaagaga tgagacacta gtgtctcatg agtagaacct ggaccagaca  caaatctcca ttccaatgt ttagtgctc attagtccc aacaacaaga tattgggtct  atgtgggtag gcctggggca tcctgtacaa caggagatgt gtaggggag ggagaacaga  tcacaaatc atggagagt attgacag cagatactcc catccactct gatagtgtg  taatgttcag ctgttcttaa aagacacac caacaatggg tgttctattc cagcctagga  aaatgtagag gcaaggggtc tgaggccaga ggacacact agatggacca ctgctcctga  ctgtgatgtt tgggccact caggtccacg caccocatgg tctgggggaa aattgctgg  ttcagccaga gggctggatg gacagtgtt gctgagtcac agatatctct cteatgtagc  cttgtctcc acagtggta ccaggaggca cagaacccaa acctggtatc tcagtctgt  ggcgtctttc ttcaaaatga gacgaatgaa accatacata tgcagatgag catggcagtg  ggacagcagg cctgcccctt gaatacatt gccccaaagg ctgtgctggt ctcctctgt  gggtctttat tgaatggcac tgtctctggt ctgcttctggt gtggggccac gaatccctac  atggtatata tctccaactt ggtcgtgct cagtgtatct atcttctgtg ctgggcagtg  gggtctttac agtgactctt gctaaactat catggagtct tgttttttat cctgatttc  ctggccatat tgtctcctt ctcctttgag gtgtgtctct gtctcctggt ggccatcagc  acagagcgtt gtgtgtgtg cctcttccc cctcatctgg ggctgacct ttgcatcaa catagtaaaa  acatctaag ttgtctgcac cctcatctgg ggcctgacct ttgcatcaa catagtaaaa  tcaattttcc taacttactg gaaacatgta aaggcatgtg tcaattttct aaagctttct  gggtctctcc atgctatcct ttcacttggt atgtgtgtg ctgagctgac tctactcatt  agattctctgt gctgtctcca gcagcaaaag gccaccaggg tctatgctgt ggtgcagatc  tcggccccc a tttctact ctgggccc a cccctgagcg tggcacccct cataacagat  ttcaaaatgt ttgtcaccac tctctattta atttcttctg tctctattat aaacagcagc  gccaacccta tcaattattt ctttgtgggg agcctcagaa agaaaaggct gaaggaaatc  ctcagagtga ttctccaacg ggcgttagca gataagccag aggtggggag gaacaaaaag  gcagctggca tgcacccaat ggagcaacca cactctactc agcatgtgga gaacctctt  cccagggagc acaggttcga tgtggaaaca taatttccca catctgagct gggaattgt  acacatagta acccagcctg ttctgcatca taaggctgct gcatcaaatc aatgctttat  tctaatacag ttcagctttc atggactttc aaaaacaccc cttgctgttt gtggttgaa  gagacattaa cttcttctc aggcagtaag cccagtttga atgtgtcca gttccaaaga  tgaggggaaat gggacccagt gagactttcc tggtagctgt ggaatccaaa taaagacccat  acaaaggcat gaattc </p>	G Protein-Coupled Receptor MRG	AAB21255.1	Homo sapiens
155	<p> aaagagaaga tctggaggga gattttgtct tctctgtgag cagcagcagc  ttcctacgga cctgtctgga gcccagctc ggatcagccc tctgacagc aatgaatgct  tcgtgtgccc tgcctctgt tcaagccaaca ctgcctaagt gctcggagca cctcaagcc </p>	Melanocortin 3 Receptor (MC3R)	NM_019888	Homo sapiens

156	3057	Melanocortin NP_063941.1 3 Receptor (MC3R)	<p> ccttttctca gcaaccagag cagcagcgcc ttctgtgagc aggtcttcac caagcccgag  attttctcgt ctctgggcat cgtcagtcgt ctggaataca tcctgggttat cctggccgtg  gtcaggaacg gcaacctgca ctcccagatg tacttcttcc tctgcagcct ggccgtggcc  gacatgctgg taagtgtgtc caatgccctg gagaccatca tgatcgccat cgtccacagc  gactacctga ccttcgagga ccagtttacc gagcacatctt caaacatctt cgtcccatg  atctgcattc ccttggtggc ctccattcgc aacctcctgg ccattgcctg gacaggttac  gtcaccatct tttaacgcgt ccgtaccac agcatcatga ccgtgaggaa ggccctcacc  ttgatcgtgg ccattcgggt ctgctgggc gtctgtggcg tgggtgttcac cgtctactcg  gagagcaaaa tggctattgt gtgctcacc accatgttct tggccatgat gctctcactg  ggcaccctct acgtgcacat gttctctttt gcgcggtgc acgtcaagcg catagcagca  ctgccacctg ccgacggggt ggccccacag caaacactcat gcatgaagg ggccgtcacc  atcaccattc tctgggctg gttcatcttc tgctgggccc ccttcttctt ccactgggtc  ctcatcatca cctgccccac caacccttac tgcattctgct acactgcccc cttaaacacc  tacctgttcc tcatcatgtg caactcctg atcgacccac tcatctacgc ttcccgagc  ctggaattgc gcaacacctt tagggagatt ctctgtggct gcaacggcat gaactggga  tag </p>	<p> Homo sapiens </p>
157	3058	Melanocortin NP_005912 4 Receptor (MC4R)	<p> MSIQKKYLEG DFVFPVSSSS FLRTLLPQL GSALLTANNA SCCLPSVQPT LPNGSEHLQA P  PFFSNQSSSA FCEQVFIKPE IFLSLGIVSL LENILVILAV VRNGNLHSPM YFFLCSLAVA  DMLVSVSNAL ETIMIAIVHS DYLTFEDQFI OHMDNIFDSM ICISLVASIC NLALIAVDYR  VTIFYALRYH SIMTVRKALT LIVAIWVCCG QGSCVFIVYS ESKMVIVCLI TMFFAMMLLM  GTLVHMFELF ARLHVKRIAA LPPADGVAPQ VCHSMKVAVT ITILLGVFIF CWAPFFLHLV  LIITCTPNPY CICYTAHENT YLVLMCNVSQ IDPLIYAFRS LELRNTFREI LCGCGNMNIG  attggtgaact ccaccacccg tgggatgcac acttctctgc acctctggaa ccgcagcagt A  tacagactgc acagcaatgc cagtgaagtc cttggaaaag gctactctga tggagggtgc  tacgagcaac tttttgtctc tctgaggtg tttgtgactc tgggtgtcat cagcttgttg  gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc acctatgtac  ttttcatct gcagctggc tgggctgat atgctgggtga gcgtttcaaa tggatcagaa  accattatca tcacctatt aacagtagca gatacggatg cacagagttt cacagtgaat  attgataatg ctattgactc ggtgatctgt agtctctgc ttgcattccat ttgcagcctg  ctttcaattg cagtggacag gtactttact atcttctatg ctctccagta ccataacatt  atgacagtta agcgggttgg gatcatcata agttgtatct gggcagcctg cactgtttca  ggcattttgt tcatcattta ctacagatagt agtgcgttca tcatctgctt catcaccatg  ttcttcacca tgcgtgctct catggcttct ctctatgtcc acatgttctt gatggccagg  cttcacatta agaggattgc tgtctctccc ggcactgggtg ccattccgca agtgccaat  atgaaggag cgattacctt gaccatcctg attgccgtct ttgtgtctg ctgggccccca  ttcttctctc acttaatat tctacatctct tgcctcaga atccatattg tbtgtgtctc  atgtctcact ttaacttga tctcatactg atcatctgta attcaatcat cgtactctctg  atttatgcac tccggagtca agaactgagg aaaacctca aagagatcat ctgtgtctat  ccccggggag gccttctga ctgtctagc agataataa </p>	<p> Homo sapiens </p>
158	3058	Melanocortin NP_005903.1 4 Receptor	<p> MVNSTHGMH TSLHLWNRSS YRLHNSASES LGKGYSDGGC YEQLFVSPEV FVTLGVISLL P  ENILVIVAIA KKNLHSPMY FFICSLAVAD MLVSVSNGSE TIIITLLNST DTDQSFVTN </p>	<p> Homo sapiens </p>



(MC4R)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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162	3061	Melanocortin 1 Receptor (MC1R)	NP_002377.2	MAVQSQRRRL ATIAKNRNLIH DVTICSSMLS AYYDHAVALL VTLLILLGIF HSQELRLTLK EVLTCWSW	LGSLNSTPTA SPMYCFICCL SLCFLGAIIV CLVWFFFLML FLCWGPFPLH EVLTCWSW	IPQLGLAANQ ALSDLLVSGS DRYISIFYAL VLMVLYVHM LTLIVLCPEH PTCGCIFKNF	TGARCLEVSI NVLETAIVILL RYHSIVTLPR LARACQHAQG NLFALILIICN	SDGLFSLGL LEAGALVARA ARQAVAAIWV IARLHKRQRP VHQGFGLKGA AIIIDPLIYAF	VSLVENALVV AVLQQLDNVI ASVVFSTLFI VHQGFGLKGA AIIIDPLIYAF	Homo sapiens
163	3079	Melatonin Receptor type 1a	NM_005958	ccggcgggagc gggacgcgaa gtgtcccgcg atcttcacca aacaagaagc gtggtggcca ctgggctatc atattcaaca tacgacaaac acgtggcgcg tactcgtgca cacttctctg ctccagggtca aggaaatttg aacttcattg tggctgtttg tacggggtac acagccaggg ccgtctccac acgttccggg gcagagtggg cgtgctgtca gagagttaca tgcatccagg ttgcattctt taaatgagca agtgcctctt	ggtcggggcgg gcaggggcaac ggggccctcg cattcctggga tcagggaagc tttatccgta tgcaactgca tcaccggcat tgtacagcag ccgtcctgcc ccttcgcccc tcccattgat gacagagggt tcaccatggt gcttgccgtt ggccctggag ctacatggcg tttcagggaag ggacagctct caataatgta acgtgcgca tcccaacttt ccctccaat ggaatgcggt tgcaaacctt tgaagacttc tttttttct gaaaggctga	gcgagcaggg ggcagcaggg tgcctctgac cccgccagca tatttcacca gaatacagga aacgacgtgg gtaaaggtgg aggcctcgct acctggctgc ctactagtca tcagggtgg ggatgcggtg tattgtaaat tagcagaaaa tttttttct gtaaatggaa acataaatca	cgggcgcatgg tgcccaacgc cgccctagc tcactcctgc gcttagcggg tatttaacaa gcgtggaac gcctgagcgt acatctgcc tgctctcat tcagtagca ccatgcctg tgagaatatg aactgaaacc ccatttgctg tggtgcctag gctgcctcaa gaattatagt ccgatagggt actccgttta cttgacagat tgccatagtt agagaagtac ggtagagta gagtgccaca atgaaagaga atgtatatta caacaatga gttaatggct	ccctcggggc ctccagcccc ctgcgtctc ggtgtatcgg ggcagacctg cggtggaac cgcgtctccc cagctctcaag tcctgtctat tcagtagca ccatgcctg tgagaatatg aactgaaacc ggctcctctg gatccacagag tgccattata ctcgtctctg taaatggaaa aaaagcacc gtctgggaaa tctgagctaa agaatgtatg agctgctgaa aaaggggtaa atgtatatta atgtgggtg catacaaat	Homo sapiens	

164	3079	Melatonin Receptor type 1a	NP_005949.1	<p>caaaaccaca accaaacacca caaacctttc agctggcaga gttagcattg ggtagctata ctcatggtca taaatgtttg ccgtctata ttacaagtgtg tgcattgcaac cagataaaga actaaatcat aggcgggga cagtgcgtca cacctgtaac ctgagcactt tgggaggctg aggtggcgag atcaactgag ttcaggagtt tgagaccacc ctggggcaac atgatgaaat cccatctcta aaaaaatata aaaaattatc tgggcatggt gcacagccct gtaatccag ctactcagga gactgagtta ggagaaatccc ttgagcccca gaggcagagg ttgtggtgag ccgagatcgc gccagtacat tccaacttag gctacagaaat gaggactcgc ccaaaaaaa aaaaaaa</p>	Homo sapiens
165	3080	Melatonin Receptor type 1b	NM_005959	<p>MQNGSALPN ASQVLRGDG ARPSWLASAL ACVLIFTIV DILGNLVL SVYRNKKLRN P AGNIFVSLA VADLVVAIYP YPLVLSIFN NGWNLGYLHC QVSGFLMGLS VIGSIFNITG IAINRYCYIC HSLKYDKLYS SKNSLCYVLL IWLLTLAAVL PNLRAGTLOX DPRIYSCTFA QSVSSAYTIA VVVFHFLVPM IIVIFCYLRI WILVLQVRQR VKPDRKPKLK PQDFRNFVTM FVVFLEAIC WAPLNFILGA VASDPASMVP RIPEWLFVAS YMYAFNSCL NAIYGLLNQ NFRKEYRRII VSLCTARVFF VDSSNDVADR VKWKPSPLMT NNNVVKVDSV</p> <p>acgcgagctg ggcagggaag agagcgccc gctcagtaact gcgcgcgcc tgcggctgtc A cggggccgcg cgggtggcaa agcacagcg cggagagtgct gcgatgtcag agaaccggctc cttcgcaac tgcgcgaggg cggcggggtg ggcagtcgc cgggctggt cgggggctgg cagcgcgcg cctccagga cccctcgacc tccctgggtg gctccagcg tgcgcgcgt gctcatcgt accacgcgc tggacgtcgt gggaaccctc ctggtgatcc tctccgtgct caggaaccgc aagctccgga acgcaggtaa ttgttcttg gtgagctctg cattggctga cctggtggtg gcttctacc cctaccgct aatctcttg gccatctct atgacggctg ggccctgggg gaggagcact gcaaggccag gcctttgtg atgggcttga gctcatcgg ctctgtctc aatatcactg ccatcgccat taaccgtac tgctacatc gccacagcat ggcctaccac cgaatctacc ggcgctgga caccctctg cacatctgcc tcatctggct cctcaccgtg gtggccttgc tgcccaactt ctttgtgggg tccctggagt acgacccacg catctattcc tgcaccttca tccagaccgc cagcacccag tacacggcg cagtgggtgt catccacttc ctctcccta tgcgtgctg tctcttctg taccctgcga tctgggtgct ggtgcttcag gcccagga aagccaagcc agagagcag ctgtgcttga agcccagga cttgcgagc ttttaacca tgttgtgtgt gtttgtgatc tttgccatct gctgggctcc acttaactgc atcgccctg ctgtggccat caaccccaa gaaatggctc ccagatccc tgaggggcta tttgtcacta gctacttact ggcttattc aacagctgcc tgaatgccat tgtctatggg ctctgaacc aaaacttccg cagggaatac aagagatcc tctggccct ttggaacca cggcactgca ttcaagatgc ttccaaggcg agccaacgg aggggctgca gagccagct ccaccatca ttggtgtgca gcaccaggca gatgctctc agcctggatc tgaggcacac cagcagcatg acaaaactcat gaaatggtg gagagagctc gctgcaaggg tgagaccag cagcctgctg ggccacactg tctgttggc atcacagccc caaggctggg ggaaacttcat gctgggacaa gcagcccatc aacgccatgg ttacagctg atccaggga tgctcacagg ccacaggacc tggaaaacac tcttgtgtgt gctttgggga ttgtgtgac acaagaccaa ggaaggaca gaatgaggaa aggcctgggg cagaagagcc caactcctc tcatagctga cctcatcct cctgccttgg cctctctggc cttctccc cttccccc gcatggcagg atcttctct gttagcaagg atgaaagaga gaggtcagta ggactggaac</p>	Homo sapiens

166	3080	Melatonin Receptor type 1b	NP_005950.1	<p>ttgtaacta caaggccctc aggtggggca ggtgcagagg gc</p> <p>MSENGSPANC CEAGGWAVER GWSGAGSARP SRTPRPWA PALSAVLIVT TAVDVVGNLL P</p> <p>VILSVLRNRK LRNAGNLFV SLALADLVA FYYPYPLIVA IFYDGMALGE EHKASAFVM</p> <p>GLSVIGSVFN ITAIANRYC ICHSMAYHR IYRRWHTPLH ICLIWLLTVV ALLPNFFVGS</p> <p>LEYDPRISYC TFIQTASTQY TAAVVVIHFL LPIAVVSFCY LRWLVVLQA RRAKAPESRL</p> <p>CLKPSDLRSF LTMFVVFVIF AICWAPLNCI GLAVAINPQE MAPQIPEGLF VTSYLLAYFN</p> <p>SCLNAIVYGL LNQNFREYK RILLALWNP RHCIDASKGS HAEGLQSPAP PIIGVQHQAD</p> <p>AL</p>	Homo sapiens
167	3081	Melatonin- Related Receptor	NM_004224	<p>tggttgctgt ctggacctgg ctgctgatcc tgagcctgct gggagatctt aacgatcccc A</p> <p>aggagcaaca tggggccccc cctagcgggt cccaccocct atggctgtat tggctgtaag</p> <p>ctaccacagc cagaataccc accggctcta atcatcttta tgttctgcgc gatggttatac</p> <p>accatcggtg tagacctaat cggcaactcc atggtcattt tggctgtgac gaagaacaaag</p> <p>aagctccgga attctggcaa catcttctgt gtcagtctct ctgtggcgga tatgctggtg</p> <p>gccatctacc catacccttt gatctgcat gccatgtcca ttgggggctg gcatctgagc</p> <p>cagttacagt gccagatggt cgggttcata acagggtgga gtgtgggtcg ctccatcttc</p> <p>aacatcggtg caatcgctat caaccgttac tgcatactt gccacagcct ccagtacgaa</p> <p>cggatcttca gtgtgcgcaa tacctgcata tacctggtca tcacctggat catgaccgtc</p> <p>ctggctgtcc tgcccacaat gtacattggc accatcgagt acgatccctg cacctacacc</p> <p>tgcatttca actatctgaa caaccctgtc ttactcttta ccatcgctg catccacttc</p> <p>gtctccctc tctcctcgt ggtttctgc tacgtgagga ttggaccaaa agtgcgtggc</p> <p>gccgtgacc ctgcaggga gaatcctgac aaccaacttg ctgaggttgc caattttcta</p> <p>accatgttg tgatcttct cctcttgcga gtgtgctggt gccctatcaa cgtgctcact</p> <p>gtcttggtgg ctgtcagtc gaaggagatg gcagggaaga tccccaaactg gctttatctt</p> <p>gcagctact tcatagccta ctcaacagc tgcctcaacg ctgtgatcta cgggtcctc</p> <p>aatgagaatt tccgaagaga atactggacc atcttccatg ctatgcggca cctatcata</p> <p>ttcttccctg gcctcatcag tgatatctgt gagatcgagg agcccggtac cctggcccg</p> <p>gccctgccc atgctcgcga ccaagctcgt gaacaagacc gtgcccatgc ctgtcctgct</p> <p>gtggaggaaa ccccgatgaa tgtccggaat gtccattac ctggtgatgc tgcagctggc</p> <p>cacccgacc gtgctcttgg ccacctaaag cccattcca gatcctctc tgcctatcgc</p> <p>aaatctgct ctacccacca caagtctgtc tttagccact ccaaggctgc ctctggtcac</p> <p>ctcaagcctg tctctggcca ctccaagcct gcctctggtc acccaagtc tgcactgtc</p> <p>tacctaaag ctgctctgt ccatttcaag ggtgactctg tccatttcaa ggtgactct</p> <p>gtccatttca agcctgactc tgttcatttc agcctgctt ccagcaaccc caagcccatc</p> <p>actggccacc atgtctctgc tggcagccac tccaagtctg ccttcagtgc tggccaccagc</p> <p>cacctaaac ccatcaagcc agctaccagc catgtcgagc ccaccactgc tgactatccc</p> <p>aagcctgcca ctaccagcca ccctaagccc gctgctgctg acaaccctga gctctctgcc</p> <p>tccattgcc ccgagatccc tgccattgcc caccctgtgt ctgacgacag tgacctccct</p> <p>gagtcggcct ctagccctgc cgttggggccc accaagctgt ctgccagcca gctggagctct</p> <p>gacaccatgc ctgaccttcc tgacctact gtagtacctg ccagtaccaa tgattaccat</p> <p>gatgtcgtgg ttgtgatgt tgaagatgat cctgatgaaa tggctgtgtg aaaaatgctc</p> <p>tctaggtgg ccaggcagt</p>	Homo sapiens

168	3081	Melatonin- Related Receptor	NP_004215.1	MGPTLAVPTP NSGNIFVVS AIAINRYCYI NYLNNPVFTV VIFLLFAVCW FRREYWTIFH TPMNVNRVPL VSGHSKPASG HVSAGSHSKS PEIPAIAHPV VVDVEDDPDE MAV	YGCIGCKLPQ SVADMLVAIY CHSLQYERIF TIVCIHFVLP CPINVLTVLV AMRHPIIFFP PGDAAAGHPD HPKSATVYPK AFSAATSHPK SDDSLLPESA SSPAAGPTKP AASQLESPTI ADLPDPTVVT TSTNDYHDVV	MFCAMVITIV IGGWDLSQLQ ITWIMTVLAV IWKVLAARD FIAYFNCLN EARTILARAA RSSHAYARKSA STHHKSVFESH KPDVHFKPAA TTSHPKPA DNPELSASHC AASQLESPTI ADLPDPTVVT TSTNDYHDVV	VDLIGNSMVI QCMVGFI LPNMYIGTIE PAGONPDNQL AEVRNFLT AVIYGLNEN HARDQAREQD RAHACPAVEE SKAASGHLKP SSNPKPITGH DNPELSASHC AASQLESPTI ADLPDPTVVT TSTNDYHDVV	LAVTKNKKLR SVVGSIFNIV YDPRYTICIF AEVRNFLT AVIYGLNEN RAHACPAVEE SKAASGHLKP SSNPKPITGH DNPELSASHC AASQLESPTI ADLPDPTVVT TSTNDYHDVV	Homo sapiens
169	3093	Metabotropic Glutamate Receptor 1	NM_000838	gaattccctt acgaaggga ggggaccac agcgggacca cggttcctt cccggcagg cgagatgtc gcccagagg gttccacacg cattagggac tgacggccag cggtccagc gatcgcttat gaggttggtc caattggacc cgcttcaaa cagcaacgct caaggctaga catgcgccgc cagagatgaa gcagtctcca cagaggaat acacctctg aaactatgtc tggtgctgac gaagcccatc atctggagag gaatctgcag aggagtgcgtg	ccagcttgta ggtggaggag ggggcgtgg ggcgtgggac tctgttttt aaagtgttc atcattggag aagtgtggg ttggataaga tctctgattt tccctcccc tctgtagcca tcagccaaa ccttctgaca tatgtctctg gagctggctg ggggagaaga gtggtggtct cttgccgtcg gtcattgaa gaggtcaggt cctgtgttc gaaaatccca caggacagta aacatgcacc gacggcagca gaggtgtggt tacactgaag aacattgatg	gagggcgtcg gcaaggcct ggcgttggg ggcttgggac cttttggag gtcgtcag gtcgtcag agtcctc agatcaggga tcaacgcgga gctggcactc ccattcgaga caggcaggac ttcaagtga gcacgcacct ctttgcaggc cagtcacac cccaggagg gcttgcgc gcttgcgc aggtgacaa aaggcccatg ggaagggaat gccccattc cctctgcgc aggtgacaga ctcactcatt gttatgaggt catttgatga ctgagttctg gcaacatcgg aatctgaca agatggggtt atgccctctg agctgctgga ttgatgagaa aggagacgtg tgactatgtg ccagatgaac aagagtggag tggtgcggtc	tgaggagacc tgaggacca ggcgcgcgc ctcgtccca gtgtccctc cgctcgttg cagcctccg atccagagg ctgcccaaca ctggaaacaga gggatcaacc attgcgggag gagtcgtcc cagctcttcg actttgtaca aatacttcc cttgacatag gcggaatgga gccccattc aaactccgag gtgcgaggac ggaagtgatg gggggaatca aaactgaggc ttccagtgc ggcaatgaaa tgctcatcaat gccatctatg gtggccctct ccttggccac agtcctcat ccttggaagt cctggaaagt cactgttgaa cctggcatga tggtgcggtc	Homo sapiens	

tgtgtgcagt gaggccttgct taaaggggcca gattaagggt atacggaaa gagaagtgag  
ctgctgctgg atttgacgg cctgcaaga gaataatat gtgcaagatg agttcacctg  
caaagcttgt gacttgggat ggtggcccaa tgcagatcta acaggctgtg agccattcc  
tgtgcgtat cttgagtga gcaacatcga gccatcgctt ttcatgcct  
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taaatattt ctatttat

Glutamate Receptor 1

sapiens

REQYGIORVE	AMFHTLDKIN	ADPVLLPNIT	LGSEIRDSCW	HSSVALEQSI
RDEKDGINRC	LPDGQSLPPG	RTKKPIAGVI	GPSSSSVAIQ	VQNLLQLFDI
DLSDKTLYKY	FLRVVPSDTL	QARAMLDIVK	RYNWTYVSAY	HTEGNYGESG
EGLCIAHSDK	IYSNAGEKSF	DRLLRKLRRR	LPKARVVVCF	CEGMTVRGLL
EFSLIGSDGW	ADRDVEIEGY	EVEANGGITI	KLQSPVRSF	DDYFLKLRLD
FWQHRFQCLR	PGHLEENPNF	KRICTGNTS	EENYVQDSKM	GFYFLAIYAM
LCPGHVGLCD	AMKPIDGSKL	LDFLIKSSFI	GVSGEEVWFED	EKGDAAPGRYD
RYDYVHVGTW	HEGVLNIDDY	KIQMNKSGVY	RSVCSEPCLK	GQIKVIRKGE
KENEYVQDEF	TCKACDLGWW	PNADLTGCEP	IPVRYLEWSN	IESIIAIAFS
TLIFVLYRDT	PVVKSSSREL	CYIILAGIFL	GYVCPFTLIA	KPTTTSYQLQ
CYSALVTVTN	RIARILAGSK	KKICTRKPFR	MSAWAQVILIA	SILISVQLTL
MPILSYPSIK	EYVILCNTSN	LGWAPLGYN	GLLIMSCYY	AFKTRNVVAN
MYTTCIIWLA	FVPYIFGSGNY	KIITTCFAVS	LSVTVALGCM	FTRPKMYILIA
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HLRSVHVKTN	ETACNQTAVT	KPLTKSYQGS	GKSLTFSDTS	TKTLYNVEEE
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RSTALQGVSN	FVSTALPDFHA	VLAPGGGPN	GLRSLYPPPP	PPQHLQMLPL
MDQLQGVSN	ERFKILLQEV	YEHEREGNT	EDELEEEED	LQAASKLTDP
SPPADDDDD	VPSSPVSESV	LCTPPNVSYA	SVILRDYKQS	SSTL
FRDSVASGSS				
DSPALTPPSP				

171 3094 Metabotropic NM\_000839  
Glutamate  
Receptor 2

Homo sapiens

[illegible]



172	3094	Metabotropic NP_000830.1 Glutamate Receptor 2	aggtccgctt tgaccgctt gggtatggtta ttggcgcgcta caacatcttc acctatctgc gtgcaggcag tggcgcttat cgtaccaga aggtgggcta ctgggcagaa ggcttgactc tgacacacag cctcatccca tgggctctac agtagtcagg cccctggcc gctctcgct gcagtgaacc ctgctctccag aatgaggtga agagtgtgca gccgggcgaa gctctgctt ggctctgcat tccgtgccag cctatgagt accgattgga cgaattcact tgcgctgatt gtggcctggg ctactggccc aatgccagcc tgaactggctg cttcgaactg cccagagat acatccgctg gggcgatgcc tgggctgtgg gacctgtcac catcgctgc ctgggtgccc tggccacctt gtttgtgctg ggtgtctttg tggcgacaaa tggcacacca gtggtcaagg cctcaggtcg ggagctctgc tacatctctg tgggtgtgtg cttcctctgc tactgcatga ccttcattct cattgccaag ccatccacgg cagtgtgtac cttacggcgt cttggtttgg gcactgctt ctctgtctgc tactcagccc tgtcaccaa gaccaaccg attgcacgca tcttggtgg ggcccgagg ggtgccagc ggtccagctt catcagctct gctcacagg tggccatctg cctggcactt atctcgggcc agctgctcat agtggtcgcc tggctgggtg tggaggcacc ggccacaggc aaggagacag ccccgaaagc gcgggaggtg gtgacactgc gtgcgaacca ccgcatgca agtatgttg gctcgctggc ctacaaatgt cctctcatg cgctctgac gctttatgcc ttaatactc gcaagtggcc cgaatacttc aacgaggcca agttcattgg cttcaccatg tacaccact gcatcatctg gctggcattg ttgcccact tctatgtcac ctccagtgac tacgggtgac agaccaccac catgtgctg tcaagtacgc tcagcggctc cgtgtgtgtt ggtgctctt ttgcccacaa cgtgcacatc atcctcttc agccgcagaa gaactgtgtt agccacggg caccacacag ccgctttggc agtgctgctg caggggcag ctcagcctt ggccaagggt ctggctccc gttgtcccc actgtttgca atggccgcta ggtgtgtgac tgcacaact catcgctttg a MGSLLALLAL LPLWGAAG PAKKVLTLG DLVLGGLFPV HQKGGPAEDC GPVNEHRGIQ P RLEAMLFALD RINRDPHLLP GVRLGAILD SCCKDTHALE QALDFVRASL SRGADGSRHI CPDGSYATHG DAPTAITGVI GGSYSVSIQ VANLLRLFQI PQISYASTSA KLSDKSRYDY FARTVPPDEF QAKAMAEILR FENWTYVSTE ASEG DYGETG IEAFELEARA RNICVATSEK VGRAMSRAAF EGVVRALLQK PSARVAVLFT RSEDARELLA ASQRINASFT WVASDGMGAL ESVVAGSEGA AEGAITIELA SYPISDFASY FQSLDPWNS RNPWFREFWE QRFCSFRQR DCAHSLRAV PFEQESKIMF VVNAVYAMAH ALHNMHRALC PNTRLCDAM RPVNGRRLYK DFVLNVKFDA PFRPADTHNE VRFRDGDGI GRYNIFTYLR AGSGRYRYQK VGYWAEGLTL DTSLLPWASP SAGPLAASRC SEPCLQNEVK SVOPGEVCCW LCIPCPYCYE RLDEFCTADC GLGYWPNASL TGCPELPQY IRWGDAWAVG PVTIACLGAL ATFLVLGVFV RHNATPVVKA SGREL CYILL GGVFLCYCMT FIFIAKPSTA VCTLRRLGLG TAFSVCYSL LTKTNRIARI FGGAREGAQR PRFISPASQV AICIALISGQ LLIVAVWLTV EAPGTGKETA PERREVTVLR CNHRDASMLG SLAYNVLLIA LCTLYAFNTR KCPENFNEAK FIGFTMYTTC IWLALLPIF YVTSSDYRVQ TTMCMVSVSL SGVVVLGCLF APKLHIILFQ PQKNVVSHRA PTSRFGSAAA RASSSLGQGS GSQFVPTVCN GREVVDSTTS SL cttttgtctc ggatgaggag gaccaacctt gagccagagc ccgggtgtcag gctcaccgcc A gccgctgcca ccgctgtcag ctcagcttcc tgccaggagt tgcggtgtcg aggaattttg tgacaggctc tgttagtctg ttcctccctt attgaaagga caggccaaag atccagtttg gaaatgagag aggactagca tgacacattg gctccacctt tgatatctcc cagaggtaca	Homo sapiens
173	3095	Metabotropic NM_000840 Glutamate Receptor 3	cttttgtctc ggatgaggag gaccaacctt gagccagagc ccgggtgtcag gctcaccgcc A gccgctgcca ccgctgtcag ctcagcttcc tgccaggagt tgcggtgtcg aggaattttg tgacaggctc tgttagtctg ttcctccctt attgaaagga caggccaaag atccagtttg gaaatgagag aggactagca tgacacattg gctccacctt tgatatctcc cagaggtaca	Homo sapiens

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174	3095	Metabotropic NP_000831.1 Glutamate Receptor 3	tggttggttg caccgaaggt tcacatcatc ctgtttcaac ccagagaaga tggtgtcaca cacagactgc acctcaacag gttcagtgct agtggactg ggaccacata ctctcagtc tctgcaagca cgtatgtgcc aacggtgtgc aatggcgagg aagtcctcga tccaccacc tcattctgtg gattgtgaat tgcagttcag tcttggtgtt tttagactgt tagacaaaa tgctcagtg cagctccaga atatggaaac agagcaaaa agaaccccta gtaccttttt ttagaacacag tacgataaat tatttttag gactgtatat agtcatgtgc tagaactttc taggtgagt ctagtcccc tattattaac aattcccca gaacatggaa ataaccattg tttacagagc tgcagcattgg tgacagggct tgacatgtgc agtctactaa aaaaaaaa aaaaaaacaa aaaaaaaa acaaaagaaa aaaataaaaa tacgggtgca atattatga acctttttc ctatgaagtt tttgtaggt cttgtgtga actaatttag gatgagtctc tatgtgtgat attaaagta cattatgtg aacagatga tttctcagc acaaaataaa aagcatctgt attaatgtaa agatactgag aataaaacct tcaagggtttt MLTRLQVITL ALFSKGFLLS LGDHNFLRRE IKIEGLVLG GLFPINEKGT GTECGRINE P DRGIQRLLEAM LFAIDEINKD DYLLPGVKLG VHILDTCSR D TYALEQSLEF VRASITKVDE AEYMCPCDSY AIQENIPLLI AGVIGGSYSS VSIQVANLLR LFQIPQISYA STSAKLSDKS RYDYFARTVP PDFYQAKAMA EILREFNWTY VSTVASEGDY GETGIEAFEQ EARLNICIA TAEKVGRSNI RKSYSVIRE LLQKPNARVV VLFMRSDDSR ELIAAASRAN ASFTWVASDG WGAQESIIG SEHVAYGALT LELASQPVQ FDRYFQSLNP YNNHRNPWR DFWEQKFQCS LQNKRNHRRV CDKHLAIDSS NYEQSKIMF VVNAYAMAH ALHKMQRTL PNTKLCDDAM KILDGKLYK DYLLKINFTA PFNPNKDADS IVKFDTFGD MGRYNVFNQ NVGKYSYLK VGHWAETLSL DVNSIHSRN SVPTSQCSDP CAPNEMKMQ PGDVCCWICI PCPEYELAD EFTCMDCSG QWPTADLTGC YDLPEDYIRW EDAWAIGPVT IACLGFMCTC MVTVFIKHN NTPLVKASGR ELCYILLFV GLSYCMTFFF IAKPSVICA LRRGLGSSF AICYSALLTK TNCIARIFDG VNKAQRPKF ISPSSQVFIC LGLILVQVM VSVWLILEAP GTRTYLAEK RETVILKCNV KDSSMLISLT YDVLVILCT VYAFKTRKCP ENFNEAKFIG FTMVYTCIIW LAFLPIFYVT SSDYRVQTTT MCISVSLSGF VVLGCLFAPK VHILFQPKQ NVVTHRLHLN RFSVSGTGT YSQSSASTYV PTVCNGREVL DSTTSSL	Homo sapiens
175	3096	Metabotropic NM_000841 Glutamate Receptor 4	ccagatgaca aggaggtggg agagggtagc agcatgggct acgcggttgg ctgacctcag A tccccctgct gctgaagctg ccttgcccat gccaccacag gccgtggggc caggggacctg ccagggctag gagtgggctt gccgttcctg ggtctctagg gatttccgag atgcttgga agagaggctt gggctggtg tggggccggc tgcccccttg cctgctctc agcctttacg gccccctgat gccttctctc ctgggaaagc ccaaaaggcca cctcacatg aattccatcc gcatagatgg ggacatcaca ctgggaggcc tgttcccggt gcattggccgg ggtcagaggg gcaagccctg tggagaactt aagaaggaaa agggcatcca ccggtggag gccatgctgt tcgccccgga tcgcatcaac aacgaccccg acctgctgc taacatcacg ctgggcgccc gcattctgga cacctgctcc agggacaccc atgccccbga gcagtgcgtg accttbtgc aggcgtcat cgagaaggat ggacagaggg tccgctgtgg cagtggcggc ccaccatca tcaccaagcc tgaacgtgtg gtgggtgtca tcggtgcttc agggagctcg gctccatca tggtggccaa catctctcgc ctcttcaaga taccacagat cagctacgcc tccacagcg cagacctgag tgacaacagc cgctacgact tcttctcccg cgtggtgccc tcggacacgt accaggccca ggccatggtg gacatgctcc gtgacctcaa gtgtccacag	Homo sapiens

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176 3096 Metabotropic NP\_000832.1 Homo sapiens  
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177 3097 Metabotropic NM\_000842 Homo sapiens  
Glutamate Receptor 5

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180	3098	Metabotropic NP_000834.1 Glutamate Receptor 6	<p> tgggcctctc tggcaggaac tctgatgcac cgcgaggccc atgtactcct gtggttttct  cacattgggt ctacttgagc ggtatctcca cagcatgcac cattctgggt acagggggac  atcctctgtt actgaagatg ttgtcatatt tagtaccttc acaagggttc tctcctcca  gaattttctg atgtacacaa ataatgact tccacacagg ggtttttcca cactcgggtg  gtgcatacag ttctcgctg tgatcatctt tttatgttat tttttttat tttcgagata  gggtcttgct caatttctta ggctggagtg cagtggcag atcatagctc actgaagttt  cgacctgggc tcaagcaatc ctccgcttc agcctctga gtactgggtg cgcacgacca  taccagcta atgttttatt tttttagag acgaggtctc actatgttc ccaggctgg  ctcgaacttc tgagctcgag cgatcctctt gctccacct cccaaagtgt tcgattaca  aacgtgagcc atcgaccta gctctttga tcatctctgt ggtgttcagt ggggttgac  agctccctaa agatttctt gttttttgc atgcatgggt ttgaattctt tgaggtccaa  tttatttggga cccctgaata agttttgtg ggttttctt tatgttgga attatatagg  cattttcca gtgtggttc ttttatgtcg agtgagctg gacctgcacc gaagttgtc  ccattgttg ccttggaatt atctgtatga attatatgtt ccagtgaata tggagtctg  ggtggaggc ttattccatg ttacacaaat taaaattgca gtgttctct ctgggatgag  agctctaaag cagagtaaga ttacttctg atgtaagct taaccaccta ttataagg  ctcactgtg gtccactgtg ttgagacttc tacagaagag ctctctgata gtaaccattt  tcttaggctg tctcactgtg gtgaatcttc tgacacattt attatagctt tgtccattt  cttatcctt ttgctcttta gaaatttccc ttttaatttat tacattcatt gcttactgta  aagagtccag gtaactgact ttaattcaag ttacttctg ttaactttt  cc </p>	Homo sapiens
181.	3099	Metabotropic NM_000844 Glutamate Receptor 7	<p> MARPRAREP LLVALLPLAW LAQAGLARA GSVRLAGGLT LGGLFPVHAR GAAGRACGPL P  KKEQGVHRL EAMLYALDRN ADPELLPGVR LGARLIDTCS RDTYALEQAL SFVQALIRGR  GDGDEVGRC PGGVPLRPA PPERVAVVG ASASSVIMV ANVRLFAIP QISYASTAPE  LSDSTRYDF SRVPPDSYQ AQAMVDIVRA LGWNYVSTLA SEGNYGESV EAFVQISREA  GGVCIAQSIK IPREPKPGEF SKVIRRLMET PNARGIIFA NEDDIRRVLE AARQANLTGH  FLWGSDSWG AKTSPILSLE DVAVGAITIL PKRASIDGFD QYFMTSRLEN NRRNIWFAEF  WEENFNCKLT SSGTQSDST RKCTGEERIG RDTYEQEGK VQFVIDAVYA IAHALHSMHQ  ALCPGHTGLC PAMEPTDGRM LLQYIRAVRF NGSAGTPVMF NENGDAAGRY DIFQYQATNG  SASSGQYQAV GQWAEITRLD VEALQWSGDP HEVPSSLCSL PCGPGERKKM VKGVPCCWHC  EACDGYRFQV DEFTCEACPG DMRPTNHTG CRPTPVVRLS WSSPWAAPPL LLAVLGIVAT  TTVVATFVRY NNTPIVRASG RELSYVLLTG IFLIYAITFL MVAEPGAAVC AARLFLGLG  TTLSYALLT KTNRIYRIFE QGKRSVTPPP FISPTSQLVI TFSLTSLQV GMIAWLGARP  PHSVIDYEEQ RTVDPEQARG VLKCDMSDL LIGCLGSLL LMVTCVYAI KARGVPETFN  EAKPIGFTMY TTCIIWLAFV PIFFGTAQSA EKIYIQTTTL TVSLSLASV SLGMLYVPKT  YVTLFHEQN VQKRRLSKA TSTVAAPPKG EDAEAHK  gaattcccaa caccagcta attttgtat ttttagtaga gattgggttt caccatgttg A  gccaggatgg tctccatctc ttgacctcg gcttggtctc caaaagtgtt  gggattacag gcatgatgca ccatatccag ccaactcag cctattctat ggggcaaca  cttggtgaa cccaggttt ctaagatac aaacctagg gcaacacca gcttctaat  ggaataggca cctggctgac tccaggcatt ctaataatag agacacctg gcgaactcag </p>	Homo sapiens

acgggtcgccc ctccccggat tccccacccc tccgtgcctg caggagcccc tgggctttcc  
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cctcgggggg ctgttccccg tgcaagccaa aggtccagc ggagtgcct gggcgacat  
caagaggga aacgggatcc acaggctgga agcgatgctc tacgccccg accagatcaa  
cagtatccc aactactgc ccaacgtgac gctgggcgcg cggatccctg acactgttc  
caggacact tacgcgctcg aacagtgcgt tactttcgtc caggcgctca tccagaaggga  
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cactttcat cgctacaatg aacgccccat tgtccgggca tctggcgggg aactcagcta  
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agactacgat gaacacaa caatgaaccc tgagcaagcc agaggggttc tcaagtgtga  
cattacagat ctccaaatca ttgtctcctt ggatatagc attcttctca tggtcacatg

182	3099	Metabotropic NP_000835.1 Glutamate Receptor 7	tactgtgtat gccatcaaga ctoggggtgt accgagaaat tttaacgaag ccaagcccat tggattcaat atgtacacga catgtatagt atggcttgcc ttcattccaa tttttttgg caccgctcaa tcagcggaag agctctacat acaaaactacc acgcttacaa tctccatgaa cctaagtga tcagtggcg tgggatgct atacatgctg aaagtgtaca tcatcatatt ccaccctgaa ctcaatgtcc agaaacggaa gcgaagcttc agggcggtag tcacagcagc caccatgtca tcgaggctgt cacacaaacc cagtacaga cccaacggtg aggcaaaagac cgagctctgt gaaaacgtag acccaaacag ccctgctgca aaaaagaagt atgtcagtta taataacctg gtatatcaac ctgttccatt ccatggaacc atggaggagg aagacctca gttatattgt caccacacct ggcataggac tctttggtcc tacccgcttc ccatcaccgg aggagcttcc ccggccggga gaccagtgtt agaggatcca agcgacctaa acagctgctt tatgaaatat ccttacttta tctgggctta ataagtcact gacatcagca ctgccaaact ggctgcaatt gtggaccttc cctaccacaa ggagtgttga aactcaagtc cgcgccggc tctttagaat ggaccactga gagccacagg accgttttgg ggctgacctg tcttattacg tatgtacttc tagtttgcaa ggttttgaaa ttttctgtac agtttgtgag gacctttgca ctttgccatc tgatgtcga cctcggttca ctgtttgttt tcgaatgcct tgtttcata gagccctatt ctctcagacg gtggaatatt tggaaaaatt ttaaaacaat taaaatttta aagcaatctt ggcagactaa acaagtaaca tctgtacatg actgtataat tacgattata gtaccactgc acatcatggt tttttttttt aagacaaaaa agatgtttta agacaaaaa ctgtgctgag aaagtatgcc ccacctatct ttggtatatg ataggttaca taaaagggaag gtattggctg aactgaatag aggtcttgat ctttggatg catgccagta atgtatttta cagtacatgt ttattatgtt caatatttgt atttgtgttc tctttgttta ttttaatta gggtatatga atattttgca ataattttta taattattaa gctgtttgaa ggaagaata tggatttttc atgtcttgag gttttgttca tgccccctt gactgatcag tgtgataagg actttaggaa aaaaagcatg tatgtttttt actgtttgta ataagtactt tegttaactt tgctgcttat gtgccaatct agtggaataa acaaacctt gctgaaaaat tccctcttcc cattctcttt caattctgtg atattgtcca agaattgtatc aataaggaaat tc MVQLRKLLRV LTLMKFPCCV LEVLLCALAA AARGQEMYAP HSIRIEGDVT LGGLFPVHAK P GPSGVPCGDI KRENGIHRLE AMLYALDQIN SDPNLLPNVT LGARILDTCs RDTYALEQSL TFVQALIQKD TSDVRCNNGE PPVFKPEKV VGVIGASGSS VSIMVANILR LFQIPQISYA STAPELSDDR RYDFFSRVVP PDSFQAQAMV DIVKALGWNV VSTLASEGSY GEKGVESFTQ ISKEAGGLCI AQSVRIPQER KDRITDFDRI IKQLLDTFNS RAWIFANDE DIKQILAAAK RADQVGHFLW VGSDSWGSKI NPLQHEDIA EGAITIQKR ATVEGFDAYF TSRTLENNRR NVWFAEYWE EFNCKLTISG SKKEDTRKC TGQERIGKDS NYEQEGKVQF VIDAVYAMAH ALHHMNKDL C ADYRGVCP EMEQAGGKKLK YIRNVNFGS AGTPVMENKN GDAPGRYDIF QYQTTNTSNP GYRLIGQWTD ELQINIEDMQ WKGGVREIPA SVCTLPCKPG QRKKTQKGT CCWTCEPCDG YQYQFDEMT C QHCPYDQRP NENRTGCQDIP IIKLEWHSPW AVIPVFLAML GIATFVMA TFIRYNDTPI VRASGRELSY VLLTGIFLCY IITFLMIAPK DVAVCSFRV FLGLMCISY AALLTKTNR IYRIFEQKKS VTAPRLISPT SQLAITSLI SVQLLGVFIW FGVDPNII I DYDEHKTMNP EQARGVLKCD ITDLQITCSL GSYILLMVT C TVYAIKTRGV PENFNEAKPI GFTMYTTCIV WLAFTPIFFG TAQSAEKLYI QTTTLTISMN LSASVALGML YMPKVYIIF HPENLVQKRK RSKAVVTAA TMSSRLSHKP SDRPNGEAKT ELCENVDPNS
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182 3099 Metabotropic NP\_000835.1 Homo sapiens  
Glutamate  
Receptor 7

183	3100	Metabotropic Glutamate Receptor 8	PAKKKYVS Y NNLVI	Homo sapiens
			tgctgtgttg caagaataaa ctttgggtct tgattgcaa taccacctgt ggagaaaatg A	
			gtatgcgagg gaaagcgatc agcctcttgc ccttgtttct tctctttgac cgccaaagtct	
			tactggatcc tcacaatgat gcaagaact cacagccagg agtatgcca ttccatacgg	
			tggtatgggg acattatttt ggggggtctc ttccctgtcc acgcaaaagg agagagaggg	
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			gcaattgacc agattaaaca ggacctgat cctctttcca acatcaactc ggtgtctcgc	
			atcctcgaca cgtgctctag ggacacctat cctttggagc agtctctaac attcgtgcag	
			gcattaatag agaaagatgc ttgggatgtg aagtgtgcta atggagatcc accattttc	
			accaagcccg acaagatttc tggcgtcata ggtgctgcag caagctccgt gtccatcatg	
			gttgctaaca tttaagact tttaagata cctcaaatca gctatgcac cacaagcccca	
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			agcacagagt acaagtcac cggccactgg accaatcagc ttcatctaaa agtggaaagac	
			atgcagtggt ctcatagaga acatactcac ccggcgtctg tctgcagcct gccgtgtaag	
			ccaggggaga ggaagaaaac ggtgaaagggt gtcccttgcct gctggcactg tgaacgtgtg	
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			gcaccagata caatcatatg ctccctccga cgggtcttcc taggacttgg catgtgtttc	
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			aaatctgtca cagcgccttc gttcattagt ccagcatctc agctgggtgat caccttcagc	
			ctcatctccg tccagctcct tggagtgttt gtctgttttg ttgtggatcc cccacacac	
			atcattgact atggagagca gcggacacta gtccagaga aggccagggg agtgcctaaa	
			tgtgacattt ctgatctctc actcatttgt tcaacttggat acagtatcct ctgtatgggt	

184	3100	Metabotropic NP_000836.1 Glutamate Receptor 8	acttgtagt tttatgcaa taaacagaga ggtgtccag agactttcaa tgaagccaaa cctattggat ttaccatgta taccactgc atcatttggg tagctttcat ccccatctt tttggtacag ccagtcagc agaaagatg tacatccaga caaacacact tactgtctcc atgagtttaa gtgttcagt atctctggc atgtctata tgcccaagg ttatatata atctttcatc cagaacagaa tgttcaaaaa cgaagagg gcttcaaggc ttgtgtgaca gctgccacca tgcaaaagcaa actgatccaa aaaggaatg acagacaaa tggcaggtg aaaagtgaac tctgtgagag tcttgaacc aacacttct ctaccaagac aacatatatc agttacagca atcattcaat ctgaacagg gaaatggcac aatctgaaga gactgtgtat atgatcttaa atgatgaaca tgagaccgca aaaaatcact cctggagatc tccgtagact acaatcaatc aaatcaatag tcagtcttgt aggaacaaa aattagccat gagccaaaag tatcaataaa cggggagtga agaaacccgt ttatataaat aaaaccaatg agtgtcaagc taaagtattg cttattcatg agcagttaa acaaatcaca aaaggaacac taatgttagc tcgtgaaaaa aatgctgttg aataaataa tgtctgagt tattcttga ttttctgtg attgtgagaa ctcccgcttc tgtccacat tgtttaact gtataagaca atgagctctg ttcttgtaat ggctgaccag attgaagccc tgggttggtg taaaaataa tgcaatgatt gatgatgca atttttata caataattt atttctaata ataaaggaat gtttgcaaa aaaaaaaaa aaaaactcga g	Homo sapiens
185	3212	Opioid mu- type Receptor	ggaattccgg ctataggcag aggagaatgt cagatgctca gctcggctcc ctccgctga A cgctcctctc tgtctcagcc aggactgggt tctgtaagaa acagcaggag ctgtggcagc ggcgaagga agcggctgag gcgcttgga cccgaaggt ctccgtgctc ctggctacct gcacagcgg tgcgcgcgc gcgctcagta ccatggacag cagcgtgccc cccacgaacg ccagcaattg cactgatgcc ttggcgtact caagtgtctc cccagcacc ccccccgtt cctgggtcaa ctgtccccc ttagatggca acctgtccga cccatgcggt ccgaaccgca ccaaactggg cgggagagac agcctgtgcc ctccgaccgg cagtcctcc atgatcacgg ccatcacgat catggccctc tactccatcg tbtgctgtgt ggggctcttc ggaacttcc	Homo sapiens

[illegible]

188	3223	Muscarinic acetylcholin e Receptor M1	NP_000729.1	<p> tggctggccc tggactatgt ggccagcaat gctccgtca tgaatctgt gctcatcagc  tttgaccgt acttctcgt gactcgccc ctgagctacc gtgccaagcg cacacccgc  cgggcagctc tgatgatcgg cctggcctgg ctggtttctt ttgtgctctg ggcccagcc  atcctcttct ggcagtaact ggtagggag cggacgatgc tagctggga gtgctacatc  cagttctctt ccagcccat catcaccttt ggcacagcca tggctgectt ctactccct  gtcacagtca tgtgacgct ctactggcg cttactggcg agacagaaa ccgagcacgg  gagctggcag cccttcaggg ctccgagacg ccaggcaag ggggtggcag cagcagcagc  tcagagaggt ctacagccagg ggtgagggc tcaccagaga cctctccagg ccgtgctgt  cgctgctgcc gggcccccag gctgctgag cctacagct ggaaggaaga agaggaaag  gacgaaggct ccatggagtc cctcacatcc tcagagggag aggagcctgg ctccgaagt  gtgatcaaga tgccaatggt ggaccccgag gcacaggccc ccaccaagca gccccacgg  agctcccaa atacagtcaa gaggccgact aagaaagggc gtgacgagc tggcaagggc  cagaagcccc gtggaagga gacgtggcc agcgggaaga ccttctcgt ggtcaaggag  aagaaggcgg ctcgaccct gactggccat cctctggcct tcactctcac ctggacaccc  tacaacatca tgggtgctggt gtccaccttc tgcaaggact gtgttccga gacctgtgg  gagctgggct actggctgtg ctactcaac agcacatca acccctgtg ctacgcactc  tgcaacaaag ccttccggga cacttctgc ctgctgtgctg ttgcccgtg ggacaagaga  cgctggcgca agatccccc aagccccgga ggcctctggc tccgtgcacc gcactccctc ccgccaatgc  tga </p>	Homo sapiens
189	3224	Muscarinic acetylcholin e Receptor M2	NM_000739	<p> atgaataact caacaaactc ctctaacaat agcctggctc ttacaagtcc ttataagaca A  tttgaagtgg tgtttattgt cctgggtggct ggatccctca gtttggtag cattatcggg  aacatcctag tcatggtttc cattaaagtc aaccgccacc tccagacctt caacaattac  ttttattca gcttggcctg tgctgacctt atcataggtg ttcttccat gaacttgtag  acctctaca ctgtgattgg ttactggcct ttgggacctg ttgtgtgtga cctttggcta  gccctggact atgtggtcag caatgcctca gttatgaatc tgcctcatcat cagctttgac  agtaacttct gtgtcacaaa acctctgacc taccagatca agcggaccac aaaaatggca  ggtatgatga ttgcagctgc ctgggtcctc tctttcatcc tctgggctcc agccattctc  ttctggcagt tcatgttagg ggtgagaact gtggagatg gggagtgcta cattcagttt  ttttccaatg ctgctgtcac ctttggtagy cttatggcag ccttctattt gccagtgtac  atcatgactg tgctatatg gcacatatcc cgagccagca agacaggat aaagaaggac  aagaaggagc ctgttgccaa ccaagacccc gtttctcaa gtctggtaga aggaaggata  gtgaagccaa acaataacaa catgccagc agtgacgatg gcctggagca caacaaatc  cagaatggca aagccccag ggtcctctg actgaaact gtgtcaggg agaggagaag </p>	Homo sapiens



190	3224	Muscarinic acetylcholin e Receptor M2	NP_000730.1	<p>gagagctcca atgactccac ctcaagtcagt gctgttgccct ctaatatgag agatgatgaa ataaccagg atgaaaacac agtttccact tccctgggcc attccaaaga tgagaactct aagcaaacat gcatcagaat tggcaccaag accccaaaaa gtgactcatg taccacaact aataccaccg tggaggtagt ggggtcttca ggtcagaatg gagatgaaaa gcagaatatt gtagcccgca agattgtgaa gatgactaag cagctgcaaa aagaagagcc tctccttcc cgggaaaaa agatcaccag gacaatcttg gctattctgt tggctttcat catcacttgg gccccataca atgtcatggt gctcataaac acctttgtg caccttgcat ccccaacact gtgtgacaa ttggttactg gctttgttac atcaacagca cstatcaacc tgcctgctat gcactttgca atgccacctt caagaagacc tttaaacacc ttctcatgtg tcattataag aacataggcg ctacaaggta a</p>	Homo sapiens
191	3226	Muscarinic acetylcholin e Receptor M4	IG1143	<p>MNNSINSSNN SLALTSPYKT FEWVFIVLVA GSLSLVTIIG NILVMVSIKV NRHLQTVNNY P FLFSLACADL IIGVFSMNLX TLYTVIGYWP LGPVVCDLWL ALDYVWSNAS VMNLLIISFD RYFCVTKPLT YPVKRTTKMA GMMIAAAWVL SFILWAPAIL FWQFIVGVRT VEDGECYIQF FSNAAVTEGT AIAAFYLPVI IMTVLYWHIS RASKSRIKKD KKEPVANQDP VPSILVQGR I VKPNNNMPS SDDGLEHNI QNGKAPRDPV TENCVOGEEK ESSNDSTSVS AVASNMRRDE ITQDENTVST SLGHSKDENS KQTCIRIGTK TPKSDSCTPT NTTVEVVGSS GQNGDEKQNI VARKIVMTK QPAKKKPPPS REKKVTRTIL AILLAFITW APYNVMVLIN TFCAPCIPNT VWTTIGWLXY INSTINPACY ALCNATFKKT FKHLMLCHYK NIGATR CCTGGCAGTG CCGATGTTCC GATACTGGCA CAGCAGCAGG TGCCGGAAGG TCTTTTAAA A GGTGCGGTG CACAGAGCAT AGCAGGCAGG GTTGATGGTG CTGTTGACGT AGCAGAGCCA GTAGCCAATG GACCACACCG GGTCAAGGAT CAGAAGGTGT TCACCAAGGAC CATGACGTTG TGAGGCCTCC CCGTGAGGAT GAAAGTAAAC ANAATGGCAA AGATCGGTGCG TGGCACGTTG CGCTCCCGGG CCGCATCTG CCGCTCTTG CGCACCTGGG TCGGAGCGAT GCTAGCGAAC TTGCGGGCCA CGTTGGCCGC AGGCGGCATGC CAGNCGGCGT GGGAGGGACA ATCTCAGGGC TGGCACACAC TCATGGGCTG GCTGGGCTTG TCAAATTTTG GATCTTGGAC CATCTGGGAG GCTTGGTTGA AGGCCCCCGG CTCGGACTTG CGGGCATGAA TCCAGGCCTT ACTCTANAGG ATCCCCCCCT CTCC</p>	Homo sapiens
192	3226	Muscarinic acetylcholin e Receptor M4	NM_000741	<p>atgggcaact tcacacctgt caatggcagc tcgggcaatc agtccgtgag cctgggtcacg A tcatcatccc acaatcgcta tgagacggtg gaaatgggtct tcattgccac agtgacaggc tccctgagcc tggtagctgt cgtgggcaac atcttggtga tgcgtgccat caaggtaaac aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc ataggcgctt tctccatgaa cctctacacc gtgtacatca tcaagggcta ctggccccgtg ggcgccgtgg tctgcgacct gtggctggcc ctggaactacg tggtagagaa cgcctccgtc atgaaccttc tcatcatcag ctttgaccgc tacttctgag tcaccaagcc tctcaactac cctgccccgc gcaccaccaa gatggcaggc ctcattgattg ctgctgcctg ggtactgtcc ttcgtgctct gggcgccctgc catcttgctt tggcagtttg tggtaggtgaa gcggacgggtg cccgacaacc actgcttcat ccagttccctg tccaacccag cagtgaacct tggcacagcc attgctgcct tctacctgcc tgtggtcatc atgacgggtgc tgtacatcca catctccctg gccagtcgca gccgagtcga caagcacccg ccgaggggccc cgaaggagaa gaaagccaaag acgtggcctt tctcaagag cccactaatg aagcagagcg tcaagaagcc cgcgccggga ggcgccccgg gaggactgag caatggcaag ctggaggagg cccccccgcc agcgtgcca</p>	Homo sapiens

Homo  
sapiens

P

Muscarinic  
acetylcholin  
e Receptor  
M4

3226

193

ccgcccaccgc gccccgtggc tgataaggac. acttccaatg agtccagctc aggcagtgcc  
 accagaaca ccaaggaacg ccagaccaca gactgttcca ccacagaggc caccactccc  
 gccatgcccgc cccctccctt gcagccgagg gccctcaacc cagcctccag atggtccaag  
 atccagattg tgacgaagca gacaggcaat gactgtgtga cagccattga gattgtgcct  
 gccacgcccgc ctggcatggc cctgcggccg acgctggccc gcaagttgc cagcattcgt  
 gcgaaccagg tgcgcaagaa gcggcagatg gcggcccagg agcgaaagt gacacgaacg  
 atctttgcca ttctgctagc ctccatccct accctggacc cctacaaagt catggtcctg  
 gtgaacacct ttctgccagag ctgcaccctt gacacgtgtg ggtccattgg ctactggctc  
 tgtactgtca acagaccat caaccctgcc tgcctatgctc tgtgcaacgc cacttttaaa  
 aagaccttcc ggcacctgct gctgtgccag tatcggaaca tcggcactgc caggtag  
 MANFIPVNGS SGNQSVRLVT SSSHNRYETV EMVFATVTG SLSLVTVVGN ILVMSIKVN  
 RQLQTVNNYF LFSLACADLI IGAFSMNLYT VYIKGYWPL GAVVCDLWLA LDYVVSNASV  
 MNLIISFDR YFCVTKPLTY PARRTTKMAG LMTAAAWLS FVLWAPAILF WQFVVGKRTV  
 PDNHCFLQFL SNPAVTFGTA IAAFYLPVVI MTLVLIHISL ASRSRVHKKR PEGPKKKAK  
 TLFLKSPIM KQSVKKPRPG GRPGGLRNGK LEEAPPALP PPRPVADKD TSNESSSGSA  
 TQNTKERPAT ELSTTEATP AMPAPPLOPR ALNPASRWSK IQIVTKQTGN ECVTAIEIVP  
 ATPAGMRPAA NVARKEFASIA RNQVRKKRQM AARERKVTRT IFAILLAFIL TWTPYNNMVL  
 VNTFCQSCIP DTVWSIGYWL CYVNSTINPA CYALCNATFK KTFRHLILCQ YRNIGTAR  
 atggaagggg attcttacca caatgcaacc accgtcaatg gcaccccaatg aaatcaccag A  
 cctttggaac gccacagggt gtgggaagtc atccacattg cagctgtgac tgctgtggta  
 agcctgatca ccatgttggg caatgtcttg gtcattgatct ccttcaaatg caacagccag  
 tcaagacag ttaacaacta ttactctgct agcttagcct gtgcagatct catcattgga  
 atcttctcca tgaacctcta caccacctac atctcattgg cagctgtggc tctcggggag  
 ctggtttgtg acctttggct tgcaactggac tacgtggcca gcaacgcttc tgtcatgaac  
 ctctgtgtga tcagttttga ccgttacttt tccatcacia gacccttgac atatcgggccc  
 aagcgtactc cgaagaaggc tggcatcatg attggcttgg cctggctgat ctccttcac  
 ctctggggccc cagcaatcct ctgctggcag tacttggttg ggaagcggac agttccactg  
 gatgagtgcc agatccagtt tctctctgag cccaccatca cttttggcac tgccattgct  
 gccttctaca tccctgttcc tgtcatgacc atctctact gtcgaatcta ccgggaaca  
 gagaagcgaa ccaaggacct ggctgacctc caggttcttg actctgtgac caaagctgag  
 aagagaaagc cagctcatag ggctctgttc agatcctgct tgcgctgtcc tgcacccacc  
 ctggccagc gggaaaggaa ccaggcctcc tggctatcct cccgcaggag cactccacc  
 actgggaagc catcccaagc cactggccca agcgcaaat gggtccaaagc tgagcagctc  
 accactgta gcagctacc ttctcagag gatgaggaca agccccccac tgacctgtc  
 ctccaagtgg tctacaagag tcagggttaag gaaagccag ggaagaatt cagtgctgaa  
 gagactgagg aaacttttgt gaaagctgaa actgaaaaa gtgactatga caccctaaac  
 taccttctgt ctccagcagc tgcctataga cccaagagtc agaaatgtgt ggcctataag  
 ttccgattgg tggtaaaagc tgacgggaac cagagagcca caaatggctg tcacaaggtg  
 aaaatcatgc cctgccccct cccagtgccc aaggaacctt caacgaaagg cctcaatccc  
 aacccagcc atcaaatgac caaacgaaag agagtgttcc tagtcaaga gaggaagca  
 gccagacac tgagtgcct tctcctggcc ttcatcatca catggacccc gtataacatc

Homo  
sapiens

A

Muscarinic  
Acetylcholin  
e Receptor  
M5

3227

194

195	3227	Muscarinic Acetylcholin e Receptor M5	NP_036257.1	MEGDSYHNAT LKTVMNYILL LLVISFDRYF DECQIQLSE KRKPAHALF TTCSSYPSE YLLSPAAHR NPSHQMKRK YWLCVNSTV	TVNGTPVNHQ SLACADLIIG SITRPLTYRA PTITFGTAIA RSCLCRPRPT DEDKPATDPV PKSQKCVAYK RVVLVKERKA NPICYALCNR	PLERHRLWEV ILFNMNLYTTY KRTPKRAGIM AFYIPVSVMT LAQERNQAS LQWVYKSQK FRLVVKADGN AQTLISAILLA TFRKTFKMLL	ITIAAVTAV ILMGRWALGS IGLAWLISFI IYLCRIYRET WSSRRSTST ESPEEFSAE QETNNGCHKV FIITWTPYNI LCRWKKKKE	SLITIVGNVL LACDLWLALD LWAPAILCWQ EKRTKDLADL TGKPSQATGP ETEETFKAE KIMPCFPFVA MVLVSTFCDK EKLIVQGNLSK	VMISFKVNSQ YVASNASVMN YLVGKRTVPL QGSDSVTKAE SANWAKAEQL TEKSDYDTPN KEPSTKGLNP CVPVTLWHLG LP	P	Homo sapiens
196	3378	Tachykinin Receptor 3	NM_001059	ctattgcagt gagcgacaga tcgggactg gggtgagagg ccacgggggc cctcccttc acctcaccaa gtgtgtgtgt acaaagcgcat ccatggccgc ttggcgccaa tctactccat ccagactgtc tacttgccct gctttgtgca tactgtgtga ctctctgggg ccaaaagaaa tgccctatca acatccagca ccatcatcta gggtgccttt atccaaaccg ttgaccccaa acccaagttt tcataagctc agattagtgt tgtcctatat	atctttcagc agaacttcag cagaccgtg cgtgggtgca agttgagact cgcgtggga ccagttcgtg ggcagtgga gagactgtc cttcaacacg ctactgccg gacggccatt tgctacagca ccctcagtgt atggccagaa ctgtttccca aggagaaatc ggtgtcaaa tatttacttc ggctacactg ctgtgtctg ctgtgtctg catcaaaagt gcaaagcagt cgatgcagac caatggctgc accctatacc gagaccatca accctctaga	ttccagtcct aggagtctcg gcgatggcca gacgccgtga gggtggctgc ctgcctgtgg cagccgtcct gttttgggaa acaaactact ttggtcaatt ttccagaact gggtgggaca accaagattg ctttattcca gttcccaaac tggtccatca ccaggagata atgatgatta attctcactg gctagctttt aataaaagat tccagctatg atgtacaccg accaccaggt ccagtcggaa tctcgaggga tctgtggatg tctgtggatg tggtgccagt aacagaaagc	ccccggacca cccgtgggtg agcagaaacc ctcgctagct ccaagctggc gccctcccg gctctgggtc catctgggatc cctggctttc gcttcatagc cacagctgtg tattattgat tatttggatt catgccaggc ttaccatatt atacaccatt gtatctagag gtatctagag gacatttgc acaactaat gagctcaacc cttcaagaga gctcaagacc ggagtccatg gaaaagagca tgccctccgc attccatttc ctagggtaaa ctatccctat cagctatggt caaattgaga	A	Homo sapiens		

197	3378	Tachykinin Receptor 3	NP_001050.1	aaggtagtgt ataaatgtga caaagacact aataacatgt tagcctccac caaaaataaa atgggtttta aattt MATLPAETW IDGGGGVGAD AVNLTASLAA GAATGAVETG WLQLLDQAGN LSSSPSALGL P PVASPAQSQP WANLTNQFVQ PSWRIALWSL AYGVVAVAV LGNLIVII LAHKRMRTVT NYFLVNLAFS DASMAFNTL VNFYALHSE WYFGANYCRF QNFFPITAVE ASIYSMTAIA VDYMAIIDP LKRLSATAT KIVIGSIWIL AFLAFPQCL YSKTKVMPGR TLCFVQWPEG PKQHFYHII VIILVYCFPL LIMGITYTIV GITLWGEIP GDTCDKYHEQ LKAKRKVVKM MIIIVMTFAJ CWLPYHIYFI LTAIYQQLNR WKYIQQVYLA SFWLAMSSTM YNPIIYCCLN KRFRAGFKRA FRWCPFIKVS SYDELELKT RFHPNRQSSM YTVTRMESMT VVFDENDADT TRSRKKRAT PRDPSFNGCS RNSKSASAT SSFISPYTS VDEYS	Homo sapiens
198	3380	Neuromedin B Receptor	NM_002511	gtgctgtgag gcttgccgcg ggacagtaaa cttgcaggag cgagagggag ggacatcgat A taaacctaaa tcgtgggcgt tcaatcctca gggcaccgag cgcgtgaaaa ctccagcggg ctctgctgga aaggagatca tgccctctaa gtctcttcc aacctctcg tgaccaccgg cgcaatgag agcggttccg tccccgagg gtgggaaagg gatttccgc cggtctcgga cgggaccacc acggagtgg tgatccgctg tgtgatcccg tccctctacc tgcctcatcat cacctgggc ttgctgggca acatcatgct ggtgaagatc ttcatcacca acagcgccat gaggagcgtc ccaacatct tcatctctaa cctggcgcc ggggacttgc tgcgtctgct cacctgcgtc cgggtggacg cctcgcgcta cttctcgac gagggtgagt ttggcaagggt gggtgcaaaa ctgataccctg tcatccagct catctccgtg ggggtttccg tgttcaactct cactgccc c agcggcgaca ggtacagagc catcgttaac cccatggaca tgcagacgtc agggcattg ctgcggaact gtgtgaaggc catgggtatc tgggtggctc cegtgtgct ggcagttccc gaagcgggtg tttagaagt ggtcgcatac agtagcttg ataatagcag cttcacagca tgtatcccat accctcaaac agatgaatta catccaaaga ttcattcagt gctcatttct ttggtctatt tctcatacc acttgctatt attagcattt attattatca tattgcaaa accttaatta aaagcgaca caatcttct ggagaatata atgaacatac caaaaacag atggaaacac ggaacgcct ggctaaatt gtgctgtct ttgtgggctg tttcatcttc tgttggttc caaacacat cctttacatg tatcggctct tcaactataa tgagattgat ccatctctag gccacatgat tgtcacctta gttgcccggg ttctcagttt tggaattct tgtgtcaacc catttgctct ttacctactc agtgaaagct tcaggaggca tttcaacagc caactctgct gtgggaggaa gtcctatcaa gagagaggaa ccagctacct actcagctct tcagcgtgc gtatgacatc tctgaaaagc aatgctaaga acatggtgac caattctgtt ttactaaatg ggcacagcat gaagcaggaa atggcaatgt gattttgccc attcaactca ctacctggag agaacttagt aa MPSKSLSNLS VTMGANESG VPEGWERDFL PASDGTTEL VIRCVIPSLY LIITVGLLG P NIMLVKIFIT NSAMRVPNI FISNLAAGDL LLLTCTPVD ASRYFDEWM FGKVGCKLIP VIQLTSVGS VFTLTALSAD RYRAIVNPM QOTSGALLRT CVKAMGIWV SVLLAVPEAV FSEVARISL DNSSTACIP YPQTDHLPK IHSVLIPLVY FLIPLAISI YYHIAKTLI KSAHNLPGY NEHTKKQMET RKRLAKIVLV FVGCFTCFWF PNHILYMYS FNYNEIDPSL GHMIVTLVAR VLSFGNSCVN PFALYLLSES FRRHFNSQLC CGRKSQYERG TSYLLSSAV RMTSLKSNK NMVTNSVLLN GHSMKQEMAM	Homo sapiens
199	3380	Neuromedin B Receptor	NP_002502.1		Homo sapiens

200	3404	Neuropeptide Y Receptor Type 2	NM_000910	Homo sapiens
tatcctatcc	ctatcctagc	ttttaaacctg	agccagagct	cactacacag gttcctggct A
atcaggtctg	aatctgcact	actcaactta	taaacgtctt	gcagacacct gttaggga
ttgtctgata	tggcgccag	gatctgaact	cgttttacct	tcttggttg agcacagga
ccgccagct	agaggagcac	cagcgactg	cgccccagcc	ctggcgagg gtgcggagga
ttgtttctcg	gtgcaatcct	gctggcgctt	ttccggggtt	ctgcgcggat ccagctcccc
atctctgctc	ctacacacac	aaaagaaaac	aactctcgat	tggaaagtgt ggaattttct
cagccccctac	gaggcgccgg	gattctccag	ccccggccct	cctcccccca gctgaggtc
tccttgctc	gcctgccttg	ctagggaccg	cagtcctca	gccgcagctg ggtctgtccg
ccccgccttt	gccctgcctt	tttccccggg	cggatttggt	gaagtcggcc tcaagtccag
gaggtctgtc	ttcgccggc	cagctctcgc	ggaactgggg	ggtagagagc aaaggagag
attcgtggaa	gggaaggag	gtagggttg	cgcaaacgcc	cagagtatca aacttgggg
tggcacagta	ggtgacagca	gcagctgcag	gtggtggctg	gggacccgcg agggggcgcc
cctctgggta	gggtctggct	gagcggtctt	gcaagcccg	gagcggtcg agagacctg
gacactgttc	ctgctccctc	gccacaaaa	cttctcctcc	agtccccctc cctgcaggac
catcgccgc	agcctctgca	cctgttttct	tgtgtttaag	ggtggggttt gccccctcc
ccacgtctcc	atctctgac	ctcccacctt	caccgcacca	ccccgcgagt gagtgcgtg
ccagggcgcg	cttggcctga	gaggtcggca	gcagaccgg	cagcgccaac cgccagccg
ctctgactgc	tccggctgcc	cgccgcgcgc	gcgcgggtg	tcttggacce taggagggga
cggaaaccgga	cttgcctttg	ggcaccttcc	aggccctct	ccaggtcggc tggctaataca
tcggacagac	ggactgcaca	catcttgttt	cccgctctcc	gcaaaaaacgc gaggtccagg
tcagttgtag	actcttgtgc	tggttgcagg	ccaagtggac	atgtactgaa aatgggtcca
ataggtgcag	aggctgatga	gaaccagaca	gtggaagaaa	tgaagggtga acaatacagg
ccacaaaaca	ctcctagagg	tgaactggtc	cctgaccctg	agccagagct tatagatagt
accaagctga	ttgagggtaca	agttgttctc	atatggcct	actgtccat catcttgctt
ggggtaatg	gcaactcctt	ggtgatccat	gtggtgatca	aattcaagag catgcgcaca
gtaaccaact	ttttcattgc	caatctggct	gtggcagatc	ttttggtgaa cactctgtgt
ctaccgttca	ctcttaccta	tacctaatg	ggggagtgga	aaatgggtcc tgtcctgtgc
cacctgggtgc	cctatgccc	gggcctggca	gtacaagtat	ccacaatcac cttgacagta
attgccccgg	accggcacag	gtgcctcgtc	taccacctag	agagcaagat ctccaagcga
atcagcttcc	tgattattgg	cttggccctg	ggcatcagtg	ccctgctggc aagtcctctg
gccatcttcc	gggagtattc	gctgattgag	atcatcccg	actttgagat tgtggcctgt
actgaaaagt	ggcctggcga	ggagaagagc	atctatggca	ctgtctatag tctttcttcc
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agtaaaattga	agaaccatgt	cagtccttga	gctgcaaatg	accactacca tcagcgaaag
caaaaaacca	ccaaaatgct	ggtgtgtgtg	gtgggtgtgt	ttgcgggtcag ctggctgcct
ctccatgcct	tccagcttgc	cgttgacatt	gacagcagg	tcctggacct gaaggagtac
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cagcggttgg	atgccattca	ctctgaggtg	tccgtgacat	tcaaggctaa aaagaacctg
gaggtcagaa	agaacagtgg	ccccaatgac	tctttcacag	aggctaccaa tgtctaaagg
agctgtggtg	tgaataatga	tggatgaatt	ctgaccagag	ctatgaatct ggttgatggc

[illegible]

202	3405	Neuropeptide Y Receptor Type 4	NM_005972	atgaacacct ctacacctct tggccttgctg ctcccaaat ctccacaag ctccacaag tgaacaacaga A agcaaacccc tgggcacccc atacaacttc tctgaacatt gccaggattc gccaggattc cgtggacgtg atggtcttca tegtcaactc ctacagcatt gagactgtcg tgggggtcct tgggggtcct gggtaacctc tgctgatgt gtgtgactgt gaggcagaag gagaagaca acgtgacca cctgcttacc gcaacctgg ccttctctga ctctctcatg tgcctcctct gccagccgt gccagccgt gccagccgt tacaccatca tggactactg gatcttttga gatctctct gccagatgt gccagatgt gccagatgt cagtgcattg cggtagcgtg ctccatcttc tgctctctc tgcctgctc tgcctgctc tgcctgctc cagctcatca tcaacccaac aggtggaag cccagcatct cacaggccta cctggggatt gtgctcatct ggttcattgc ctgtgtctc tccctgctc tccctgctc tccctgctc cagcatcctg gagaatgtct tccacaagaa ccaactccaa gctctggagt tccctggaga taagggtggtc tgtaccgagt cctggccact ggtcaccac cgcacatct acaccactt cctgctcctc ttccagttact gctccact ggtcttctc ctggtctgt atgcacgcat ctaccggcgc ctgcagaggc aggggctgct gtttcacaag gccactaca gcttgcgagc tgggcacatg aagcaggta atgtgtgct ggtgtgatg gctgtggct tgcctgctc tgcctgctc ctgcatgtgt tcaacagcct ggaagactgg caccatgag ccatcccat ctggccacggg aacctcatct tcttagtgt ccaactgctt gccatggct ccaactgct caaccatct atctatggct tctcaacac caacttcaag aaggagatca agggcctggt gctgacttgc cagcagagcg cccctctgga ggaagtcgag catctgccc tgtccacagt acatacggaa gtctccaaag ggtccctgag gctaagtgag aggtccaatc ccatttaa MNTSHLLALL LPKSPQGENR SKPLGTPYNF SEHCQSDVDV MFIIVTSYSI ETVVGLGNL P CLMCVTVRQK EKANVTNLLI ANLAFSDFLM CLLCQPLTAV VTIIMDYWIFG ETLCKMSAFI QCMSTVTSIL SLVLVALERH QLIINPTGWK PSIOYALGI VLIWVACVL SLPLFLANSIL ENVFKNHSH ALFLADKVV CTESWPLAHH RTIYITLGLL FQYCLPLGFI LVCYARIYRR LQROGRVFHK GTYSLRAGHM KQNVVLVVM VFAFVLWLP LHVFNLSLEW HHEAIPICHG NLFLVCHLL AMASTCVNPF IYGFINTNFK KEIKALVLTC QQSAPLESE HPLSTVHTE VSKGSLRLSG RSNPI	Homo sapiens
203	3405	Neuropeptide Y Receptor Type 4	NP_005963.1	gaaaggctat cggtaacaac tgacctgcca caaagttaga agaaaggatt gattcaagaa A agactataat atggatttag agctcgacga gtattataac aagacacttg ccacagagaa taatactgct gccactcgga attctgattt cccagctctg gatgactata aaagcagtggt agatgactta cagtattttc tgattgggct ctatacatctt gtaagtcttc ttggctttat ggggaatcta cttattttta tggctctcat gaaaagcgt aatcagaaga ctacggtaaa cttccatcata ggcaatctgg cctttctga tatcttggtt gtgctgttt gctcaccttt cacactgacg tctgtcttgc tggatcagtg gatgtttggc aaagtcatgt gccatattat gccttttctt caatgtgtgt cagttttggt ttcaactta attttaatat caattgcat tgtcagggtat catatgataa aacatcccat atctaataat ttaacagcaa accatggcta ctttctgata gctactgtct ggacactagg ttttgccatc tgttctccc tccagtggt tcacagctct gtggaacttc aagaacatt tggttcagca ttgctgagca gcagggtattt atgtgttgag tcatggccat ctgattcata cagaattgcc ttactatct ctttattgct agttcaggtat attctgacct tagtttgtct tacttaagt catacaagtg tctgcagaag tataagctgt ggttgttcca acaagaaaa cagacttga gaaaatgaga tgatcaactt aaactctcat ccatccaaa agagtggcc cctctgga cctctgga gccataaatg	Homo sapiens
204	3406	Neuropeptide Y Receptor Type 5	NM_006174		Homo sapiens

205 3406 Neuropeptide NP\_006165.1  
Y Receptor  
Type 5 Homo sapiens

gagttattca ttcatcaaaa aacacagaag aagatatagc aagaagacag catgtgtgtt  
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tgagataaaa cctgaagaaa attcagatgt tcataattg agagtaaac gttctgttac  
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MDLELDEYNN KTLATENNTA ATRNSDFPV DDKSSVDDL QYFLIGLYTF VSLGFMGNL P  
LILMALMKKR NQKTTVNFLI GNLAFSIDL VLFCSPTLT SVLLDQMMFG KVMCHIMPFL  
QCVSVLVSTL ILISIAIVRY HMIKHPIINN LTANHGYFLI ATVWTLGFAI CSPLPVFHS  
VELQETGSA LLSSRYLCVE SWPSDSYRIA FTISLLVQY ILPLVCLTVS HTSVCRSISC  
GLSNKENRLE ENEMINLTLH PSKKSQPQVK LSGSHKWSYS FIKKHRRRYS KKTACVLPAP  
ERPSQENHSR ILPENFGSVR SQLSSSSKFI PGVPTCFEIK PEENS DVHEL RVKRSVTRIK  
KRSRSVFYRL TILILVFAVS WMPLHLFHV TDFNDNLISN RHFKLVCYC HLLGMMSCCL  
NPILYGLNN GIKADLVSLI HCLHM

206 3408 Neurensin NM\_002531  
Receptor  
Type 1 Homo sapiens

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209	3452	Opiate Receptor- Like 1 (OPRL1)	NP_000904.1	MEPLFPAPFW VCVGGLLGNC ALCKTVIAD VGVPVAIMGS RLRGVRLISG LRFTALGVV KTSETVPRPA	EVYIGSHLQG LVMYVILRHT YNNMFTSTFT AQVEDEEIEC SREKDRNLRR NLSCLNPILYA	NLSLLSPNHS KMKTATNIYI LTAMSVDRYV LVEIPTPDY ITRLVLWVA FLDENFKACF	LLPPLLILNA FNLALADTLV AICHPIRALD WGPVFAICIF VFVGCWTPVQ RKFCASALR	SHGAFPLPLGL LLTLFPQGTD VRTSSKAQAV LFSFIVPVLV VFVLAQGLGV RDVQVSDRVR	KVTIVGLIYLA ILLGFWPFGN NVAIWALASV ISVCYSILMIR QPSSETAVAI SIAXDVALAC	Homo sapiens
210	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL)	NM_000273	atgacccagg atggccctcc gtgctgagct ttggcgctgg gcgacgtccc ggctgcctgg agcgtctcgg atgtggatcc gcttatctgg gcgtggggcc gtgtccagg ccctgctgc gcctctttac gtgatcaaga atcatcaatg ttgaacctg gcccaggat cagctctcca caccatccc gggcagactt gaaattcaca	caggccggcg cgcgccctag tcagccggcg gccttctgca cgccggccctc gtatggtgat atatgaacca agctgttgta tgatccggag tgccaccct gtgagcggg tggttctcgt ttaaagggaag tccgattttt aaagcccttt tcagaaactgc ttctcttgc ggaaggagat cactgatgc cactatccc gtgacgaagc ctgcaagtga	gggtcctggc gaccttctgc ggccttccac gtgctgccc ggctccgcatc cgggtccacc cacggaaatt cagtgccctgc atcgccagga gctctgtgtg cctggaccac ggcgaaacccc acaaggcatt caaaatcatg attctatctt agccaagacc tttgcccttc ccagtgggaa ccatgaaaac cctgcttccg cctgagcatg atcctgcaac	acaccggagc tgccccacgc cgctctgcc ggcgccggc ctgcgcgctc gtgtggttag tggcctgctg ttctggtggc ctgagcacca ctgagcagga gagggagccg gccatcccc atcctgttcc tacacggaga ctgggtttta gagatgcaaa acatggttta tacggcttga tcactgacca cctcggtcgc ggaaggtgtc gttctgtagc gtgacccctgc	cgctccgcg gggacgcagc tgggcagcgg cgcgggccc cgctgcctc gattcccaa ctttctgcgt tggtttgcta tcctgctgta ccatgctcta actatgtcac aaaagacagt acgagaggag atgaggagcc ttatttgttg tggaggttct cagatatcaa ttatgggaat cctggaatcca cctgggtttt cctcggtcgc ggaaggtgtc gttctgtagc gtgacccctgc	aacacagccc cacgcagctc cggtctccgc cggttcccc cgacctctc ttttgtgac ggggagtgcg tgcagtggat tcacatcatg ctaccttcc catgtacctg gactgcagtg gatggagacc gttgtcgaat tggaggttct cctggaatcca cctgggtttt tgaggggggt tcaagtgggt cagcacaatt tctcccaacc	Homo sapiens

211	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL)	NP_000264.1	catggagacc tatgaagggg atgtgctggg ggtccagacc ccatattctt cagactcaac aattcttgtt ctttagaact gtgttctcac cttcccaaca ctgcaactgc gaagtgtagc ggcccccaaa ccttgctctc atcaccagct agagcttctt cccgaaggcc ctttaggata ggagaaaggg ttcatgcaca cagtggtgag aatggaagag cccctccag accactctac agctgctcta gccttagttg ccactaggaa gttttctgag gctggctgta aagtaagtgt aaggtccaca tccttgggga agtagttaaa taaaatagtt atgactg MTQAGRRGPG TPEPRPTQP MASPRLTGTC CPTRDAAATQL VLSFQPRAFH ALCLSGGLR P LALGLLQLLP GRRPAGPGSP ATSPASVRI LRAAAACDLL GCLGMVIRST VWLGFNFVD SVSDMNHTEI WPAAFCVGSA MWIQLLYSAC FWLFCYAVD AYLVIRRSAG LSTILLYHIM AWGLATLVCV EGAAMLYPS VSRCEGLDH AIPHYVTMYL PLLLVLVANP ILFQKTVTAV ASLLKGRQGI YTENERMGA VIKIRFFKIM LVLIICWLSN IINESLLFYL EMQTDINGGS LKPVRTAAKT TWFMIGILNP AQCFLLSLAF YGWTGCSLGF QSPRKEIQWE SLTSAAEGA HPSPLMPHEN PASGKVSQVG GQTSDEALSM LSEGSDASTI EIHTASESCN KNEGDPALPT HGDL	Homo sapiens
212	3544	UDP-glucose Receptor (KIAA0001)	NM_014879	gaacagtgtt acctggagc ctacaatgag aggtatttca aaatgagtga agcatgactc A tcacagatga aggcctagac gcaggatctt taatggaaaa acacttgggc cacttcaaga cgacaaacgc tcactgggca aaacaccttc actgaaaaga gacctcatat tatgcaaaaa aaatcttaag aggcctctgc cttcagaagt tacaagatga tcaattcaac ctccacacag cctccagatg aatcctgctc tcagaacctc ctgatactac agcagatcat tccgtgtctg tactgtatgg tcttcatgac gggaatccta tcaatcagag gatactcttt tactgtccca gctctaagag ttctcatcat tatctcaag acattgttat gctgactttt gtgatgagcc tgacttttcc ttccaagatc cttgggtgact cagcccttgg tccctggcag ctgaacgtgt ttgtgtgcag ggtctctgcc gtgctctct acgtcaacat gtacgtcagc attgtgttct ttgggctcat cagctttgac aggtattata aaattgtaaa gcccttttgg acttcttcca tccagtcagt gaggtaacag aaacttctgt cagtgatagt atgtagctc atgctcctcc ttgctgttcc aaatattatt ctacaccaac agagtgttag ggaggttaca caaataaaat gtatagaact gaaaagtga ctgggacgga agtggcacaa agcatcaaac tacatcttcc tggccatctt ctggattgtg ttcttcttct taatcgtttt ctatactgct atcacaaaga aaatctttaa gtcccacctt aagtcgaagc ggaattccac ttcggtcaaa aagaaatcta gccgcaacat attcagcatc gtgttttgt ttttctgtc tttgtacct taccatattg ccagaatccc ctacacaaag agtcagaccg aagctcata cagctgccag tcaaaagaaa tcttgcggtg tatgaaagaa ttcaacttgc tactatctgc tgcaaatgta tgcttgacc ctattattta ttcttctcta tgcagccgt ttagggaat ctatatgaag aaattgcaca ttccattaaa agctcagaat gacctagaca ttccagaat caaaagagga aatacaacac ttgaaagcac agatactttg tgagtttcta cctcttcca aagaaagacc acgtgtgcat gttgtcatct tcaattacat aacagaatc aataagatat gtgccctcat cataaatatc atctctagca ctgccatcca ataaatttca atataaagt tccatgcttt ttgttaacat caaagaaaac ataccatca gtaatttct taatactgac ctttctattc tctattaata aaaaattaat acatacaatt attcaattct attatattaa aataagttaa agtttataac cactagtctg gtcagttaat gtgaaattt aaatagtaaa taaaacacaa cataatcaaa gacaactcac tcaggcatct tcttctcta aataccagaa	Homo sapiens

[illegible]

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Accession	Gene	Protein	Species
215	NP_000907.1	Oxytocin Receptor	Homo sapiens
3582			
216	NM_002564	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Homo sapiens
3589			

Homo  
sapiens

217 3589 Purinergic NP\_002555.1  
Receptor  
P2Y, G-  
protein  
coupled, 2  
(P2RY2)

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gcagacgcca cagtcctccc agatatggac catcagtgac tcatgctgga tgaccccatg  
ctccgtcatt tgacaggggc tcagatatatt cactctgtgg tccagagtca actgttccca  
taacccttag tcactgtttg tgtgtataag ttgggggaat taagtttcaa gaaaggcaag  
agctcaaggt caatgacacc cctggcctga tccccatgca agtagctggc tgtactgcca  
aggtacatag gttagagtc agcctaatac agtcaaatgg aaaaacaggc ccagagagga  
aggtggctta ccaagatcac ataccagagt ctggagctga gttacctggg gtgggggcca  
agtcacaggt tggccagaaa accctggtaa gtaatgaggg ctgagtttgc acagtgtct  
ggaatggact ggggtgccag gtggacttag ctctgagag taccctcagg ccaagagatg  
aacatctggg gactaatatc atagacccat ctggaggctc ccatgggcta ggagcagtg  
gaggctgtaa cttatactaa aggttgtgtt gcctgctaaa aaaa

MAADLGPWND TINGWDGDE LGRCRFNEF FKYVLLPVSY GVVCVLGLCL NAVALYIFLC P  
RLKTNASTT YMFHLAVSDA LYAASLPLLV YYYARGDHPV FSTVLCKLVR FLFTNLYCS  
ILFLTICSVH RCLGVLRPLR SLRWGRARYA RRVAGAVWVL VLACQAPVLY FVTTTSARGGR  
VTCHDTSAPF LFSRFVAYSS VMGLLLFAPV FAVILVCYVL MARRLLKPAY GTSGLPRAK  
RKSVRTIAV LAVEALCFLP FHVTRTLAYS FRSLDLSCHT LNAINMAYKV TRPLASANSC  
LDPVLYFLAG QRLVRFARDA KPPTGSPAT PARRRLGLRR SDRTDMQIRG DVLGSSEDFR  
RTESTPAGSE NTKDIRL

Homo  
sapiens

218 3595 Purinergic NM\_002563  
Receptor  
P2Y1

ccccctccc cggggatcca gttgcctgc tcccttcgc tcgctggctt ttcgatgct A  
tgctgcccc ctggccgcg ctgccccttc cccctccga gccgcgcct  
aagtcaggga ggagagaatg accgaggtgc tgtccccac ggacgggacg  
ctgcccctct gcccggctcg ggttcgtctt gggggaaacg caccgtcgc tccactgccc  
ccgtctctc gtcgttcaa tgcgccttga ccaagacggg ctccagttt tactactgc  
cggctgtcta catcttggt ttcacatcg gcttcctggg caacagcgtg gccatctgga  
tgttcgtctt ccacatgaag cctggagcg gcactcctgt gtacatgttc aattggctc  
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cagactggat ctccgggat gccatgtga aactgcagag gttcatctt catgtgaacc  
tctatggcag catcttgtt ctgacatgca tcagtgcoca ccggtacagc ggtgtggtgt  
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gctgttacgg attaatgtg agagctttga tttaaaaaa tctggacaa tctccttga  
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ctttccatgt gatgaaaacg atgaacttga gggcccggt tgattttcag acccagcaa  
tgtgtgttt caatgacagg gtttatgcca cgtatcaggt gacaagaggt ctgcaagtc  
tcaacagttg tgtggacccc attctctatt tcttggcggg agatacttcc tagcaagtc  
tctcccgagc cacaaggaaa gcttctagaa gaagtgggc aaatttgcaa tccaagagtg  
aagacatgac cctcaatatt ttacctgagt tcaagcagaa tggagatata agcctgtgag  
ggcacaagaa tctccaaa cctctctgtt gtaatatggt aggatgctta acagaatcaa  
gtacttttcc cctctttaac tttctagttt agaaaaaaat caaaccaaga aaatagttag



219	3595	Purinegic Receptor P2Y1	NP_002554.1	<p> tataaaaaat aatagaagta gaaatgcccc catccacact tagcttggtt gggtttgctt  tcacagtctc tcttccttct gactagaagt atgtataata aaacaatact acctagttaa  acatttactt tctcttttgc ctttaaaatg tgcaggcttt tctgtttaaa gtgtgtgtgc  acatgagtac tggggtgtgt tttgatatta gtaaaaaact agcccoctgc  aacttgagtt tgggtgtttt tagcctttta tttttttttt aaaaatccaca gttagaataa  aaaatctata ttctcagaaa tatctagcat ggtatataac aaacacataa actcatcagt  tcatccggca tcagatcaat ggtctctga gcgggtgtgt ttttcagtg tcttaagc  atagatgata gttgactgag ttcttttagg gcatgataa gacaagtaaa gctaataaat  ttaaagcct gaaaagtgtat tgttttccag ttattctgg aaaaaggtctc attatatatt  gggtgctaaa tgtttgatgg gaaaagcctg catatattat cgtactggta aatgcattc  aaaataatta aagtgcattg attttccttg taaacacccat gagctctctt agacatcttg  tgataaagag catttacttg cccactgct gtgcaatgcc taggacttt gttgtgttc  caggacaagt gttcactcac atctgtaaaa caattgtcaa taaattacag  accaaaagatt gagtaagtc aaataactgt tagtaagtgt aagatatatt gacaggagga  cagtatttca gaaaaggaga gttgacagt catccacaag gcatagcctc caagtatact  ctcaaatgta tgaagcaact ggggtgggca gaagacattt tagaatgagg gccttagtt  taaattaaag tcatggtgga gaagactctt gcttccacca agtgtttgaa aacacaaaa  acgatataaa aaaaaaaaaa aaaa  MTEVLWPAVP NGTDAFLAG PGSSWGNSTV ASTAAVSSSF KCALTKTGFQ FYLPVAVYL P  VFIIIGFLGNS VAIWMFVFM KMWSGISVYM ENLALADFLV VLTLPALIFY YFNKTDWIFG  DAMCKLQRFI FHNLYGSIL FLTCSAHRY SGVYPLKSL GRKKKNAIC ISVLVWLIVV  VAISPILFYS GTGVRKNKTI TCYDTSDEY LRSYFIYSMC TTVAMFCVPL VLILGCYGLI  VRALIYKDLN NSPLRRKSIY LVIIIVLTVFA VSIYIPFVMMK TMNLRLARLDF QTPAMCAFND  RVYATYQVTR GLASLNSCVD PILYFLAGDT FRRRLSRATR KASRRSEANL QSKSEDMTLN  ILPEFKQNGD TSL </p>	Homo sapiens
220	3596	Purinegic Receptor P2Y5	NM_005767	<p> ctgatgaaag tgcttccaaa ctgaaaaattg gacgtgcctt tacgatggta agcgittaaca A  gctcccactg cttctataat gactccttta agtacacttt gtatgggtgc atgttcagca  tggtgtttgt gcttgggtta gtatccaaat gtgttgccat atacattttc atctgcgtcc  tcaaatgccc aatgaaact acaattaca tgattaactt ggcaatgtca gacttgcttt  ttgtttttac tttaaccttc aggttttttt acttcacaac acggaattgg ccatttggag  atttactttg taagatttct gtgatgctgt ttataccaca catgtacgga agcattctgt  tcttaacctg tattagtga gatcgatttc tggcaattgt ctacctttt aagtcacaaga  ctctaagaac caaagaaaat gcaagatttg ttgtcactgg cgtgtgggta actgtgctcg  gaggaaagtc accgcctgt ttgttccagt ctaccttc tcagggtaac aatgcctcag  aagcctgctt tgaaaaattt ccagaagcca catggaaaac atatctctca aggatgttaa  ttttcatcga aatagtggga ttttttattc ctctaatttt aatgttaact tgttctagta  tggtgctaaa aactttaacc aaaccagtta cctaattctg aagcaaaaaa acaaaaaa  aggttttaaa aatgattttt gtacatttga tcatattctg tttctgtttt gttccttaca  atatcaatct tatittatat tctctgttga gaacacaaac atttgttaat tgctcagtag  tggcagcagt aaggacaatg taccaatca ctctctgtat tgctgtttcc aactgttgtt  ttgaccttat agtttactac ttacatcggg acacaattca gaattcaata aaaaatgaaaa </p>	Homo sapiens

221	3596	Puriner Receptor P2Y5	NP_005758.1	actggtctgt caggagaagt gacttcagat tctctgaagt tcatgggtga gagaatttta ttcagcataa cctacagacc ttaaaaagta agatatattga caatgaatct gctgcctgaa ataaaacacat taggactcac tgggacagaa ctttcaag MVSVNSSHCF YNDSFKYTLY GNMFSMVFL GLVSNCAIY IFICVLKVRN ETTYMINLA P MSDLLFVFTL PPRIFYFTR NWPFGLLCK ISVMLFYTM YGSILFLTCI SVDRELAIVY PFKSKTLRTK RNAKIVCTGV WLTVIGGSAP AFTVQTHSQ GNNASEACFE NFPEATWKTY LSRIVIFIEI VGFFIPLIN VTCSSMVLKT LTKPVTLSRS KINKTKVLKM IFVHLIIFCF CFVPYNINLI LYSILVRTQTE VNCSSVAAVR TMYPIITLCIA VSNCCFDPIV YFTSDTIQN SIKMNWSVR RSDRFSEVH GAENFIQHNL QTLKSKIFDN ESAA aaggacagag gaggggccc tctctgcagc tggctgggag cagaggtggc ttgtctttt A cggaagaact ggttctgtg aatttgtgt tatttcccat caaggatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt ttctgcttg cctgtcatct ggatagtgtc taaaaattg caaactgctc tctgtcagt gcttgctca ttcttcata cactcctgat atgtctctca gtttcccat ctgctgctc tcagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca ggggtgctc cacgagtggg aattgtctc agcacttcac ggactgcag cgaggcactt gtaactctt ggatacaag acctctgcca gaagaacctat ggcttgggaa ggcggagttc aggtgagga gatgggtgag gtctcagtg agcccctgccc tccctgaaca taggaacccc acctgtgtc ccatggaatg ggacaaatgg acaggccagg ctctgggctt gccacccc accctgtgtc accgcgagaa cttcaagcaa ctgctgtgac agatctgta ttcggcggtg ctggcggtg gcctgcccgt gaacatctgt gtcattaccc agatctgac gtcccgcgg gccctgaccc gcacggccgt gtacaccta aaccttgctc tggctgacct gctatatgcc tgcctccctg ccctgtcat ctacaactat gccaaagtgt atcactggcc ctttggcag ttgcctgccc gcctggtccg ctctctctc tatgccaacc tgcacggcag catcctctc ctacactgca tcagcttcca gcgtacctg ggcactgccc accgctggc cccctggcag aaacgtgggg gccgcccggc tgcctggcta gtgtgtgtag ccgtgtggt ggcgtgaca acccagtgcc tgcccacagc catcttctg gccacaggca tccagcgtaa ccgactgtc tgcctgacc tcagcccgc tgcctggcc accactata tgcctatgg catggctctc actgtcatcg gcttctgtct gcccttggc gccctgtgg cctgctactg tctcctggc tgcgctgtg gccgcccagga tggcccggca gagcctgtgg ccaggaggc gcgtggcag gcggcccga tggcctggtt ggtggctgct gcccttgcca tcagcttct gccctttcac atcacaaga cagcctacct ggagtgccg tcgacggcgg gcgtcccctg cactgtattg gagcctttg cagcggccta caaaggcac cgccggtttg ccagtgcga cagcgtgtg gacccatcc tcttctactt caccagaag aggttccgccc ggcagaccaca tgagctcta cagaaactca cagccaaatg gcagaggcag ggtcgtgag tccctccagt cctgggcagc ctctatatt gccatttgtt ccggggcacc aggagcccc ccaacccaa accatgcga gaattagat tcagctcagc tgggcatgga gtaagatcc ctacaggac ccagaagctc accaaaaact atttctcag ccccttctct gggccagacc ctcagagacc gcagatggac agacctggg ctggtctctt agaggtccca gtcagccatg gagagctggg gaaaccacat taaggtgctc acaaaaatac agtgtgacgt gtactgtcaa aa	Homo sapiens
222	3597	Puriner Receptor P2Y6	NM_004154	aaggacagag gaggggccc tctctgcagc tggctgggag cagaggtggc ttgtctttt A cggaagaact ggttctgtg aatttgtgt tatttcccat caaggatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt ttctgcttg cctgtcatct ggatagtgtc taaaaattg caaactgctc tctgtcagt gcttgctca ttcttcata cactcctgat atgtctctca gtttcccat ctgctgctc tcagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca ggggtgctc cacgagtggg aattgtctc agcacttcac ggactgcag cgaggcactt gtaactctt ggatacaag acctctgcca gaagaacctat ggcttgggaa ggcggagttc aggtgagga gatgggtgag gtctcagtg agcccctgccc tccctgaaca taggaacccc acctgtgtc ccatggaatg ggacaaatgg acaggccagg ctctgggctt gccacccc accctgtgtc accgcgagaa cttcaagcaa ctgctgtgac agatctgta ttcggcggtg ctggcggtg gcctgcccgt gaacatctgt gtcattaccc agatctgac gtcccgcgg gccctgaccc gcacggccgt gtacaccta aaccttgctc tggctgacct gctatatgcc tgcctccctg ccctgtcat ctacaactat gccaaagtgt atcactggcc ctttggcag ttgcctgccc gcctggtccg ctctctctc tatgccaacc tgcacggcag catcctctc ctacactgca tcagcttcca gcgtacctg ggcactgccc accgctggc cccctggcag aaacgtgggg gccgcccggc tgcctggcta gtgtgtgtag ccgtgtggt ggcgtgaca acccagtgcc tgcccacagc catcttctg gccacaggca tccagcgtaa ccgactgtc tgcctgacc tcagcccgc tgcctggcc accactata tgcctatgg catggctctc actgtcatcg gcttctgtct gcccttggc gccctgtgg cctgctactg tctcctggc tgcgctgtg gccgcccagga tggcccggca gagcctgtgg ccaggaggc gcgtggcag gcggcccga tggcctggtt ggtggctgct gcccttgcca tcagcttct gccctttcac atcacaaga cagcctacct ggagtgccg tcgacggcgg gcgtcccctg cactgtattg gagcctttg cagcggccta caaaggcac cgccggtttg ccagtgcga cagcgtgtg gacccatcc tcttctactt caccagaag aggttccgccc ggcagaccaca tgagctcta cagaaactca cagccaaatg gcagaggcag ggtcgtgag tccctccagt cctgggcagc ctctatatt gccatttgtt ccggggcacc aggagcccc ccaacccaa accatgcga gaattagat tcagctcagc tgggcatgga gtaagatcc ctacaggac ccagaagctc accaaaaact atttctcag ccccttctct gggccagacc ctcagagacc gcagatggac agacctggg ctggtctctt agaggtccca gtcagccatg gagagctggg gaaaccacat taaggtgctc acaaaaatac agtgtgacgt gtactgtcaa aa	Homo sapiens

223	3597	Purinergic Receptor P2Y6	NP_004145.1	MEWDNGTGQA LGLPPTTCVY RENFKQLLLP PVYSAVLAAG LPLNICVITQ ICTSRRALTR P TAVYTLNIAL ADLLYACSLP LLIYNYAQGD HWPFGDFACR LVRELFYANL HGSILFLTCT SFQRYLGICH PLAPWHKRG RRAAWLVCVA VMLAVITQCL PTAIFAATGI QNRRTVCYDL SPPALATHYM PYGMALTIVG FLIPFAALLA CYCLACRLC RQDGPAPFVA QERRGKAARM AVVVAAPAFI SFLPFHITKT AYLAIVRSTPG VPCTVLEAFA AAYKGTRPFA SANSVLDPL FYFTQKKFRR RPHELLQKLT AKWQRQGR	Homo sapiens
224	3599	G Protein- Coupled Receptor 23 (GPR23)	NM_005296	A cctacgggtc catagtgta gagtggtaga cccctgcagc cagcaggcct cctgaaaaaa aagtccatgg gtgacagaag attcatgac ttccaattcc aagattcaaa ttcaagcctc agaccagggt tgggcaatgc tactgccaat aatactgca ttgttgatga ttocttcaag tataatctca atgggtgctgt ctacagtgtt gtattcatct tgggtctgat aaccaacagt gtctctctgt ttgtctctgt ttcccgcatg aaaaatgagaa gtgagactgc tatttttacc accaatctag ctgtctctga ttgtctttt gtctgtacac taccttttaa aatattttac aacttcaacc gccactggcc ttgtgtgtgac accctctgca agatctctgg aactgcattc ttaccacaaca tctatggggag catgctcttt ctacactgta ttagtgtgga tegtctctctg gccattgtct atccttttctg atctctgtact attagacta ggaggaaatc tgccattgtg tgtgtctgtg tctggatcct agtctcagt ggcgttatct cagcctcttt gttttccacc actaatgtca acaatgcaac caccacctgc ttgtgaaggct tctccaaaag tgtctggaag acttatttat ccaagatcac aatatttatt gaagtgtgtg ggtttatcat tctctataa ttgaatgtct ctgtctcttc tgtgtgtgtg agaactcttc gcaagcctgc tactctgtct caaatgggga ccaataagaa aaaagtactg aaaatgatca cagtacatat ggcagtcctt gtggtatgct ttgtacccta caactctgtc ctctcttgt atgccctgg tgcctcccaa gtattacta attgcttttt ggaagatttt gcaaaagatca tgtaccctaa caccttgtgc cttgcaactc tgaactgttg ttttgacctt tctatctatt acttaccct tgaatccttt cagaagtctt tctacatcaa tgcacacatc agaatggagt cctgttttaa gactgaaaca ccttgacca caaagccttc ccttcagct attcaagagg aagtgaatga tcaacaaca aataatgggtg tgaatataat gctagaatcc accctttagg tatgagaaat gtgttcagg ccagatatgg ttctctctat aatttttct atgctataaa ctaaaagattt gaagctaag atactgagaa taatgcacca aatccagtca gatacaattg ttggaaggta tactgtagag tttttattgc tgtttgttc agtaattata ggtcaaatct aattacaaca accaagatgg attgccaaac tcttctgctt ggttggaaat tcaattatc gcattatcca ggtggctagt ggcatttgat aatatagaga tgaacttgaa actttcaaaa aggtatttct attccaatga tatttggtaa ttaggttggg cctataaata tagaacaat cagggtattt ttaaaaaatt gtgttactac tgatatatgc tagttttatt ttattttttt ggactgtcat tgagtttatt ttagcacaaag aatattttta gcctaacatt attaataaga aatgtgtcaa atttttaaca ttggtaaaat atgttatgtg cattttgaaa acagaaaaa aattgcgttg gcatgtacgt gggtgggaag aaaaagaaaa ttaacaggat ttacacattt taaaatttt catgtcaaac ttcaagcca tttaaaaaac ttcgttgttt ttaccacaaa ttaaaatttt aatgtcaaac ttcaagcca gaaagctgct aaatacgtgt ctggcaggta atgtctggaa attacttaa acagggaaaag tgtcaataaa aaaacttgag caacaccaa atatttttc ttaaaatgtc acgttatctt cattttggga aactagggtc tataaaatat ttatctctcc tttatattt tggagcacag cacagccaga aaggggctgc atttgtccc aggtcaggag caaatgaaa aaaaaataa	Homo sapiens

225	3599	G Protein- Coupled Receptor 23 (GPR23)	NP_005287.1	agtaatacta ttttggagg tggagcctaa aaaaaaa mgdrreidfq lfvfcfrmk niygsmlflt vnnatttcfe gtntkkvllkm tlnccefdpfi ggelmlestf	aaaaatcaaa aggagtagag tatagccagg aaaaattcct fodsnsllrp rsetaifitn cisvdrelai gfskrvwkty itvhmafvv yyftlesfoq	ctataaacc atatataacc agctgctgaa aaaaattcct plgnatannt lavsdllfvc vypfrsrtir lskitifiev cfvpynsvlf sfyinahirm	aaaacattta tgaataact tttgtcccc tgaataact civddsfkyn tlpfkifynf trrnslavca vgfipllin lyalvrsqai eslfktetpl	ttaaaacctg tattctttct tggattgaa cgaataaaa lmgavysvfv nrhwpfgdtl gmvilvsgg vscssvvlrt tncflerfak ttkpslpaio	ilglitnsvs ckisgtaflt isaslfttn lrkpatlsqi imypitlcla eevsdqttnn	Homo sapiens
226	3638	Parathyroid Hormone Receptor 2 (PTH2)	NM_005048	ggcgggtggc tgggccagcc tcttctaca gctaattgctc tatagaggag agctcaactc gcccagagga caaccataaa cagcttaaat cagcataagga catctctttt ttgcactagg catctttgtc aataatgcag tatcgggtgc gacccctggtg caaataccctg atgggctgtg catcaagtgg tctgaatacg cacaaggaag agtgcattac ccgcatgcac ctgctactgc ctccgtggac cacogtgacg tatctctggc tggctatgtc caaggagat ggaatctaac	ccgggcccga aagttggcaa gccgttccgg ggcagctgcc cagattgtcc caggaggagg acagtgggga ggagttgctt aaaacatggg aagcaagaat ggttccttgg aactatatcc aagacacagag gatgaccac agattgtctg gaaggtctct tggggttcca gcacgagcaa atttatcaag gttagagttc caatacagga atcgtgttcg tgtgagctct aatggagagg tggaagagga cacagcacca aaagctgcca tggagtaact agtgaggagg ccagacactg	ccacccagc cttggagct gcatggccgg tccctggccag tttgtctgaa aaggtaatgg aaatatcggc tccgacactg ccaattattc tctttgaacg ctgtggctat acatgcactt tagtccatgc aaaattccat ttgtgatgtt acctgcataa tcttgatagg ctctggctga caccgatctt tagctacca aactggccaa tatgcctgcc tcttcaactc ttcaggcaga gagccagtc caccgccatg gcagccagtc agatcgccag cagacagga cagagcagga agggagatga aaggatgcca	tgcgcgtgct tctccgggc gctggggcg agcccagctg agcgaagta tttccctgaa tggtccatgc taaccccaat agacttcttc cctctatgta tctcatcatt atttgtct tcacatagga tgaggcaact tatttacttc tctcatcttt ctgggggttt tgcgaggtgc agcagctatt aactctggag atcgacactg tcactcttc ctttcagggt ggtgaagaa ttcaggcaga gagctgggc tggaagagtc gcagccagtc cagacagctt agatcgccag ctgcctgcca cagagcagga tattctaatg aggagaaact	tactggccac tctggaggag tcgtccacg gattctgatg caatgtgaac tgggatggac cctccttata ggaacatggg cgcttctgc atgtataccg ggttacttca ttcatgctga gtaaaggagc tctgtggaca ctggctacaa gtggctttct ccagcagcat tgggaactta gggctgaatt accaatggag gtcctggctc actgggctcg ttctttgtgt atgtggagtc agatgcggct gccaagcaca gcagccaca gagcttttcc cactcttcc gagagagac gagaagcctt gaggatgttc	aagttgtctc ggtccctgct tctgggggtg ctatcatcta ggtggaatct cagtgctcac gcattggtgt tcacttttac gcagccaca cactcttcc acgagagac ccaggcctat tctgaatgga	Homo sapiens

227	3638	Parathyroid Hormone Receptor 2 (PTHr2)	NP_005039.1	<p>catttggtgc tgactttcat gggctgggtcc aatggctggt tgtgtgagag ggcttggctg  atactccat gcttgagttc aaagctgaa aattcagtta aggtgttact taataatagt  ttttaggctc catgaattgg ctctgtataa tactaacgac atgaaaaatgc aagtgtcaat  ggagtgtgtt attaccttct attggcatca agtttcttc taaataatg tatggtattt  gctctgtgat tgttcaatttt tttctgtac ttttggtag aaaaaagatt caattgcttg  gctgtagctt tctctcatat atatcacctt aaataaatg aagatctttt agtgtgtatc  atttccctt tagaaactag tattctctta tttcttact taatgtactt ctatcactgc  atttatttg cctgtgcata ggagcaatta ggaataaaa aaataatgg gaagataaaa  gatctaaaga caagtacttg ctgaaaaatt agttggctgg acattgataa aataatgcat  ttataacaat tacatgtgtt tttgggaaca agaaaaattt ctcaaaaaag aatatttcac  acatcccttc ttttgaatgg cctctttgtg accagccaga cctcaggctc tctctcttc  ttctttgtaa accatgtcat gtggaagat ttcctcagt agtgagcttg tgtctgcaaa  ttgattttgt ttgtaatgta ttttgatagc aaatcctatg ccatctatat cttttcttg  tttgagctgt tactacattg tacatggcat gtgggatcaa ttaaaaaattt gttttaaaaa  t</p>	<p>Homo sapiens</p>
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NM_000316	<p>cggaggagc cggccctagg cgtggcgat ggggaccgc cggatcgac cggcctggc A  gctcctgctc tgcctgccc gctcagctc cgcgtacgc ctggtggatg cagatgacgt  catgactaaa gaggaacaga tcttctgct gcaccgtgct caggcccagt gcgaaaaacg  gctcaaggag gtctgcaga gccagccag cataatgga taagacaagg gatggacatc  tgcgtccaca tcagggaagc ccagaaaaga taaggcatct gggaagctct accctgagtc  tgaggaggac aaggaggcac ccactggcag caggtaccga gggcggccct gctgcccga  atgggaccac atctgtgct ggcgctggg ggcaccagt gaggtgggtg ctgtgcccgtg  tccggactac attatgact tcaatcaaa aggccatgcc taccagcgt gtgaccgcaa  tggcagctgg gagctggtgc ctgggcacaa caggacgtgg gccaaactaca gcgagtgtg  caaatcttc accaatgaga ctctggaac ggaggtgtt gaccgctgg gcatgatta  cacctgggc tactccgtg cctggcgtc cctcaccgt gctgtgtca tctggccta  ctttaggcg ctgactgca cgcgcaacta catccacatg cactgttcc tgtcctcat  gctgcgcgc gtgagcatct tctcaagga cgtctgtct tactctggcg ccacgttga  tgaggctgag cgcctcacg aggaggagct gcgcgccatc gccaggcgc cccgcgcgc  tgccaccgc gctgcccgt acgcgggctg cagggtggct gtgaccttct tctttactt  cctggccacc aactactact ggattctggt ggaggggctg tactgcaca gcctcatctt</p>	<p>Homo sapiens</p>

229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NP_000307.1	catggccttc ttctcagaga agaagtacct gtggggcttc acagtcttcg gctggggtct gcccgtgtc ttctgtgctg tgtgggtcag tgtcagagct accctggcca acaccgggtg ctgggacttg agtcccgga acaaaagtg gatcatccag gtgcccatcc tggcctccat tgtgtcaac ttcatcctct tcatcaatat cgtccgggtg ctgcccacca agtgcggga gaccaacgcc ggccggtgtg acacagga cagtagcttg agtctgtca aatccagct ggtgtcatg cccctctttg gcgtccacta cattgtcttc atggccacac catacaccga ggtctcaggg acgctctggc aagtcagat ccactatgag atgtcttca actccttcca gggattttt gtcgcaatca tatactgtt ctgcaatggc gaggtacaag ctgagatcaa gaaatcttg agccgtgga cactggcact ggacttcaag cgaaggcac gcagcgggag cagcagctat agctacggcc ccattgtgtc ccacacaagt gtgaccaatg tcggccccc tgtgggactc ggccctggcc ctagccccc cctactgcc actgccacca ccaacggcca ccctcagctg cctggccatg ccaagccagg gacccagcc ctggagacc tcgagaccac accacctgcc atggctgtc ccaaggacga tgggttccct aacggctcct gctcaggcct ggacaggag gctcttgggc ctgagcggcc acctgccctg ctacaggaa agtgggagac agtcattgga ccaggcgtg ggggtggag ctgctgacat agtggatgga cagatggacc aaaagatgg tggttgaatg attccact cagggcctgg ggccaagagg aaaaacaggg aaaaaagaa aaaaaaaga aaaaggaa	Homo sapiens
230	3732	PACAP Receptor Type 1	NM_001118	agccccagaga cacattggg ctgacctgcc gctgctgtca gtgggaggcc agtgggtgtg A gccaagaagt gtcattggctg gtgtcgtgca cgtttccctg gctgtcact gcggggcctg tcctgtgggc cggggcagac tcgcgaagg acgcgcagcc tgcaagtccg cggccagag acacattggg gctgacctgc cgtgctgtc agtgggaggc cagtgtgtct ggccaagaa tgtcatggct ggtgtcgtgc acgtttccct ggctgctct ctcctgtgc ctatggccc tgccatgcat tctgactgca tctcaagaa ggagcaagcc atgtgcctgg agaagatcca gagggccaat gagctgatgg gcttcaatga tctcttcca ggctgtcctg ggatgtggga caacatcacg tgttggaagc ccgcccattg gggtagatg tctctgtca gctgccctga gctcttccga atcttcaacc cagaccaagt ctgggagacc gaaaccattg gagagtctga ttttggtgac agtaacctct tagatctctc agacatggga gtggtagacc ggaactgcac ggaggatggc tggctgggaa ccttccctca ttactttgat gctgtgggt ttgatgaata tgaatctgag actggggacc aggattatta ctacctgtca gtgaaggccc tctacacggt tggctacagc acatccctcg tcacctcac cactgccatg gtcactctt gtgcctccg gaagctgcac tgcacacgca acttcatcca catgaacctg tttgtgtcgt tcatgtgag	Homo sapiens

231	3732	PACAP Receptor Type 1	NP_001109.1	<p>ggcgaatctcc gtcttcatca aagactggat tctgtatgcg gagcaggaca gcaaccactg  cttcatctcc actgtggaat gtaaggccgt catggttttc ttccactact gtgtgtgtgc  caactacttc tggctgttca tcgaggccct gtacctcttc actctgctgg tggagacctt  cttccctgaa aggagatact tctactggta caccatcat tctatttgat gctggggga cccaactgt  gtgtgtgaca gtgtgggcta cgtgagact cacttttgat gacacagggt gctgggatat  gaatgacagc acagctctgt ggtgggtgat caaagccct gtggttggct ctatcatggt  taactttgtg cttttattg gcattatcgt catcctgtg cagaaacttc agtctccaga  catgggaggc aatgagtcca gcattactt gcgactggcc cgttccacc ttgtgtctcat  ccactattc ggaatccact acacagtatt tgccttctcc ccagagaaatg tcagcaaaaag  ggaaagactc gtgtttgagc tggggctggg ctcttccag gcttttggg ttgctgttct  ctactgtttt ctgaatgggt aggtacaagc ggagatcaag cgaataatggc gaagctggaa  ggtgaacctg tacttcgctg tggacttcaa gcaccgacac ccgtctctgg ccagcagtgg  ggtgaatggg ggcacccagc tctccatcct gagcaagagc agtcccaaa tccgcatgtc  tggcctccct gctgacaatc tggccacctg agccatgctc ccct</p>	<p>Homosapiens</p> <p>WCWPRSVMAG P  CPGMDNITC  IMGFNDSSPG  NSLDLSDMGV  VSRNCTEDGW  ILCRFRKLHC  HYCVVSNYFW  TGCWDMNDST  ESSIYLRLAR  STLLLIPLFG  KWRSWKVNRY  DNLAT</p>
232	3844	Apelin Receptor	NM_005161	<p>atggaggaaag gtgtgtattt tgacaactac tatggggcag acaaccagtc tgaagtgtgag A  tacacagact ggaatccctc gggggccctc atccctgcca tctacatgtt ggtcttcttc  ctgggcacca cgggaaacgg tctgtgtctc tggaccgtgt ttcggagcag ccgggagaag  aggcgtcag ctgatatctt cattgttagc ctggcgtggg ctgacctgac cttcgtgttg  acgtgcccc tgtgggctac ctacacgtac cgggacctatg actggccctt tgggaccttc  ttctgcaagc tcagcagcta cctcatcttc gtcaacatgt acgccagcgt cttctgcctc  accggcctca gcttcgaccg ctacctggcc atcgtgagcc cagtggccaa tgcctggcgtg  aggctgctgg tcagcggggc cgtggccacg gcagttcttt ggtgctggc cgcctcctg  gccatgctgt tcatggtgtt acgcaccac ggggacttgg agaaccac taaggtgag  tgtaacatgg actactccat ggtggccact gtgagctcag agtgggctg ggaagtgggc  cttgggtct cgtccaccac cgtgggcttt gtggtgacct tcaccatcat gctgacctgt  tacttcttca tcgccccaac catcgtggc cacttcgca aggaacgcat cgaaggcctg  gggaagcggc gccggtgct cagcatcatc gtggtgtgtg ttgtgacct ttccctgtgc  tgatgacctt accactggt gaagacgtg tacatctgg gacgtctgt gcaactggcc  tgtgactttg acctcttct catgaacatc ttccctact gcacctgcat cagctacgtc  aacagctgcc tcaacccctt cctctatgcc tttttgacc cccgttccg ccaggtcctgc  acctccatgc tctgctgtgg ccagagcagg tgcgaggca cctccacag cagcagtggg  gagaagtcaag ccagctactc ttccggggcag agccaggggc ccggcccaa catgggcaag</p>	<p>Homosapiens</p>

233	3844	Apelin Receptor	NP_005152.1	<p>ggtggagaac agatgcacga gaaatccatc cctacagcc aggagaccct tgtggttgac tag</p> <p>MEEGGDFDNY YGADNQSECE YTDWKSSGAL IPAIYMLVFL LGTTGNGLVL WTVFRSSREK P RRSADIFIAS LAVADLTFV TLPFWATYTY RDYDWPFGTF FCKLSSYLIF VNMVASVFCL TGLSFDRYLA IVRPVANARL RLRVSGAVAT AVIWLALALL AMPVMVLRIT GLENTTKVQ CYMDYSMVAT VSSEWAVEVG LGVSTTVGF VVPFTIMLTC YFFIAQTIAG HFRKERIEGL RKRRRLSII VLVVTFALC WNPYHLVKTL YMLGSLHWP CDFDLFLMNI FPYCTCISYV NSCLNPLYA FFDPRFRQAC TSMMLCCGQSR CAGTSHSSSG EKSASYSSGH SQGFGPNMGK GGEQHEKSI PYSQETLVVD</p>	Homo sapiens
234	3845	Chemokine- Like Receptor 1 (CMKLR1)	NM_004072	<p>gaattcggca cgagtcaggg aagcagcccc ggcgggccagc agggagctca ggacagagca A ggctccctgg gaagcctcgg ggtgataggg gtgttcagc tgcggcgctc tgggggttca gagggggtc ttgaatgaac aatgaatga actgcttctt gggcaaacag ccacagccag aggagcctgt gattggcaga aagaagccag ggtgtgcaag tctcccaac agcctcgagt ggcctgcagt cacagggaac cctcaggaag accttcggg cagagaccag agggaagccc atctctcag cagaactgct tggattttc taccagagg ctcagggctc tgaacaatg atagcagaag ctgatggcat ctagagatct aggtgggac tagcacagca tcaattctac cactttctgt tggtcacagc aactcaccat gccagtgcag attcaagggg aggagaaata gagtcactt ctgatggga ggctgacat agaatggagg atgaagatta caacacttcc atcagttacg gtgatgaata cctgattat ttgactcca ttgtggtttt ggaggactta tccctcggga ttctgggcaa tggctgtgtg atcatcattg ccaccttcaa catcgtctgc acagtgaaca tggctctggt cctcaacctg gcagtgggcag atttctgtt caactcttc ctcccaatcc atataccta tgcggccatg gactaccat ggggttttcg gacagccatg tgcaagatca gcaacttctt tctatccac aacatgttca ccagcgtctt cctgtgacc atcatcagct ctgaccgctg catctctgtg ctctccctg tctggtccca gaaccaccg agcgttcgcc tggcttacat ggctgcatg gtcactcggg tccctggctt cttcttgagt tcccatctc tctcttccg ggacacagcc aacctgcag ggaaaatata ctgcttcaac aacttcagcc tgtccacacc tgggtcttcc tctggtccca ctactccca aatggaccct gtgggtgata gccggcacat ggtggtgact gtcaccgct tccctgtgg cttcctggtc ccagtcctca tcatcacagc ttgtacctc acctcgtgt gcaaaactga gcgcaaccgc ctggccaaga ccaagaagcc ctcaagatt attgtgacca tcatcattac cttcttctc tgctggtgcc cctaccacac actcaacctc cttagagctcc accacactgc catgctggc tgtgttctca gcttgggttt gccctggcc actgcccctg ccattgcca cagctgcatg aacccattc tgtatgtttt catgggtcag gacttcaaga agttcaaggt ggcctcttc tctcgcctgg tcaatgctct aagtgaagat acaggccact ctctctacc cagccataga agctttacca agatgtcctc aatgaatgag aggactcta tgaatgagag ggagaccggc atgctttgat cctcactgtg gaacccctca atgactctc tcaaccagag gacaccaag gatattctt ctgaagatca aggcaagaac ctcttttagca tccaccaatt ttcactgcat tttgcattgg atgaacagtg ttttatgctg ggaatctagg gcctggaacc ctttcttct agtggacaga acatgctgtg ttccatacag ccttgacta gcaatttat cttcttggga ggccagcctt gactgactca aagcaaaaaa ggaagaattc</p>	Homo sapiens



[illegible]

237	3846	Sphingolipid NP_001391.2 Receptor Edg1	catgtaagcg ggatcccggtt ttggaattt ggttgaagtc actttgattt ctttaaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagccgaaat ctgcataagg aagcccactt tatctaaatg atattagcca ggtaccttgg tgctctagga gaaacagaca agcaaaaaca agtgaatacc gaatggatta acttttgcaa accaaggag attcttagc aaatgagtct acaaaatag acatcgctct ttcccacttt tgttgatgtt tatttcagaa tcttggtgta ttcatattcaa gcaacaacat gttgtatttt gttgtgttaa agtactttt cttgattttt gaatgtattt gttcaggaa gaagtcattt tatggatttt tctaaccctg gttaactttt ctagaatcca cctcttggc ccttaagca ttacttaac tggtagggaa cgccagaact tttaagtcga gctattcatt agatagtaat tgaagatatg tataaatatt acaaagaata aaaatatatt actgtctctt tagtatggtt ttcaagtcaa ttaaacccgag agatgtcttg tttttttaa aagaatagta tttaataggt ttctgacttt tgtggatcat ttgacacata gctttatcaa ctttaaaca ttaataaact gattttttta aag MGPTSVPVVK AHRSSVSDYV NYDIIVRHYN YTGKLNISAD KENSIKLTSV VFILICCFII P LENIFVLLTI WKTKKFRPM YYFIGNLALS DLLAGVAYTA NLLSGATTY KLTPAQWFLR EGSMFVALSA SVFSLAIAI ERYITMLKMK LHNGSNFRL FLLISACWVI SLILGGLPIM GWNCSIALSS CSTVLPVLYHK HYLFCTTVF TLLLSIVIL YCRIYSLVRT RSRRLTFRKN ISKASRSSEK SLALLKTVII VLSVFIACWA PLFILLLLDV GCKVKTCIDIL FRAEYFLVLA VLNSGTNPPII YTLTNKEMRR AFIRIMSCCK CPSGDSAGKF KRPIIAGMEF SRKSDNSSH PQKDEGDNPE TIMSSGNVNS SS	Homo sapiens
238	3847	Sphingolipid NM_005226 Receptor Edg3	atggcaactg cctcccgcc gcgtctccag ccggtcgagg ggaacagagac cctgcgggag A cattaccagt acgtggggaa gttggcgagg agcctgaagg aggcctccga gggcagcacg ctcaccacgg tgctctctct ggtcatctgc agcttcacg tcttgagaa cctgatggtt ttgatggcca tctgaaaaa caataaattt cacaaccgca tgtactttt cattggcaac ctggctctct gcgacctgct ggcgggcatc gcttacaagg tcaacattct gatgtctggc aagaagacgt tcagcctgtc tcccacggctc tggttctca gggaggggcag tatgtctgtg gcccttgagg cgtccacctg cagcttactg gccatcgcca tcgagcgga cttgacaatg atcaaaatga ggccttaaga cgccaacaag aggcaccgag tcttctctct gatcgggatg tgctgggtca ttgccttcac gctggcgccc ctgcccattc tgggctggaa ctgectgcac aatctccctg actgctctac catcctgccc ctctactcca agaagtacat tgccttctgc atcagcatct tcacggccat cctggtgacc atcgtgatcc tctacgcag catctacttc ctggtgaagt ccagcagccg taaggtggcc aaccacaaca actcggagcg gtccatggca ctgctgaggga ccgtgggtgat tgggttgagc gtgttcacg cctgctggtc cccactcttc atcctctcc tcattgatgt ggcctgcagg gtgcaggcgt gcccacact cttcaaggct cagtggttca tcgtgttggc tgtgtcaca cccgccatga acccggtcat ctacacgctg gccagcaagg agatgcggcg ggccttcttc cgtctggtct gcaactgcct ggtcagggga cggggggccc gcgctcacc catccagcct gcgctggacc caagcagaag taaatcaagc agcagcaaca atagcagcca ctctccgaag gctccgaaag acctgcccc caagaccccc tcactctgca tcatggacaa gaacgcagca cttcagaatg ggatcttctg caactga MATALPPRIQ PVRGNETLRE HYQVVGKLAG RLKEASEGST LTTVLFLVIC SFIVLENIMV P LIAIWNKKE HNRMYFFIGN LALCDLLAGI AYKVNIMSG KKTFSLSPTV WFLREGSMFV ALGASTCSLL AIAIERHLTM IKMRPYDANK RHRVFLIIGM CWLIAFTLGA LPILGNCLH	Homo sapiens

C-C  
Chemokine  
Receptor 9

241	3848	C-C Chemokine Receptor 9	NP_006632.2	SMEDYVNFN FTDFYCEKNN VRQFASHFLP PLYWLVFIVG ALGNSLVILV P YWYCTRVKTM TDMFLNLAI ADLFLVTLF FWAIAAADQW KFQTFMCKV NSMYKMNFY S CVLLIMCISV DRYIAIAQAM RAHTWREKRL LYSKMVCFTI WVLAALCIP EILYSQIKEE SGIAICTMVY PSDESTKLKS AVLTLKVLG FFLPFVVMAC CYTIIHTLI QAKKSKHKA LKVTITVLTV FVLSQFPYNC ILLVQTIDAY AMFISNCAVS TNIDICFQVT QTIAFFHSCL NPVLYVFVGE RFRDLVKTL KNLGCSQAQ WVSFTRREGS LKLSSMLLET TSGALS L atggtgcaaca ttttaaaagc ttttaactta gagattaggg tgaataaaat aagtaaatgga attcaccttt gcatcttttg tgtctttctt atcatgattt ggcaaaatgc atcacctttg aaaatatttc acatattgga aaagtgtgtt ttaagtgtga tatgaagcat taattacttg tcactttctt taccctgtct caatatattt agtgtgtgca attaaagatc aaatagatac at	Homo sapiens
242	3849	G Protein- Coupled Receptor GPR1	NM_005279	atggaagatt tggaggaac attattgaa gaatttgaaa actattccta tgacctagac A tattactctc tggagtcga ttggaggag aaagtcacgc tgggagttgt tcactgggtc tccctgggtg tataattggt ggctttgtt ctgggaattc caggaaaatgc catcgctatt tggttcacgg ggctcaagtg gaagaagaca gtcaccactc tgtggttctt caatctagcc attgcggatt tcaattttct tctctttctg cccctgtaca tctctatgt ggccatgaat ttccactggc cctttggcat ctggtgtgc aaagccaatt ccttcactgc ccagttgaac atgtttgcca gtgtttttt cctgacagtg atcagcctgg accactatat ccacttgatc catcctgtct tatctcatcg gcacgaacc ctcaagaact ctctgattgt cattatatc atctggctt tggtctctt aatggcgtt cctgcctgt acttccggga cacttgagg ttcaataatc atactcttg ctataacaat tttcagaagc atgacctga cctcacttg atcaggcacc atgttctgac ttgggtgaaa ttatatcatt gctatctctt cctttgcta acaaatagta ttgtctact ttgtctcatc ttcaaggta agaagcgaac agtccatgac tccagtggc attctggac aattctggtt gtggtgtggt ccttctggtt ttgctggact ccttatcacc tgtttagcat ttgggagctc accattcacc acaatagcta ttcccacat gtgatgcagg ctggaatccc cctctccact ggttggcat tcccaatag ttgcttgaac cccatcctt atgtccta atgtggaag ttccaagctc gcttccggtc ctcaagtgt gagatactca agtacacact gtgggaagtc agctgttctg gcacagtga tgaacagctc aggaactcag aaaccaagaa tctgtgtctc ctggaacaag ctcaataa MEDLEETLFE EFENYSYDLD YYSLESDLEE KVQLGVVHWV SILVYCLAFV LGIPGNAIVI P WFTGLKWKKT VTTLWFLNLA IADFIFLLFL PLYISYVAMN FHWPFGLWLC KANSFTAQLN MFASVFTTV ISLDHYIHLI HPVLSHRHRT LKNSLIVIF IWLLASLIGG PALYFRDIVE FNNHTLCYNN FQKHDPDLTL IRHVLTVWK FIIGYLFLL TMSICYLCI FKVKRTVLI SSRHEFTILV VVAFVVCWT PYHLFSIWEL TIHNSYSYSH VMQAGIPLST GLAFLNSCLN PILYVLISKK FQARFRSSVA EILKYTLWEV SCSTVSEQL RNSETKNLCL LETAQ atggcctcat cgaccactcg gggcccccagg gtttctgact tatttctggt gctgcgccg A gggttcaaca ctcccgcac caagagcgca gaggcctcg cgggcaacgg gtcggtggct ggcgcgagac cctcagcgt cagcccttc cagagcctgc agctggtgca tcagctgaag gggctgacg tctgctcta cagcgtcgtg gtggtcgtgg gctggtggg caactgcctg ctggtgctgg tgatcgcgcg ggtgcgccg ctgcacaac tgacgaactt cctcatcgcc aacctggcct tgtccgacgt gctcatgtgc accgcctgog tgcgctcac gctggcctat	Homo sapiens
243	3849	G Protein- Coupled Receptor GPR1	NP_005270.1	atggaactca agtacacact gtgggaagtc agctgttctg gcacagtga tgaacagctc aggaactcag aaaccaagaa tctgtgtctc ctggaacaag ctcaataa MEDLEETLFE EFENYSYDLD YYSLESDLEE KVQLGVVHWV SILVYCLAFV LGIPGNAIVI P WFTGLKWKKT VTTLWFLNLA IADFIFLLFL PLYISYVAMN FHWPFGLWLC KANSFTAQLN MFASVFTTV ISLDHYIHLI HPVLSHRHRT LKNSLIVIF IWLLASLIGG PALYFRDIVE FNNHTLCYNN FQKHDPDLTL IRHVLTVWK FIIGYLFLL TMSICYLCI FKVKRTVLI SSRHEFTILV VVAFVVCWT PYHLFSIWEL TIHNSYSYSH VMQAGIPLST GLAFLNSCLN PILYVLISKK FQARFRSSVA EILKYTLWEV SCSTVSEQL RNSETKNLCL LETAQ atggcctcat cgaccactcg gggcccccagg gtttctgact tatttctggt gctgcgccg A gggttcaaca ctcccgcac caagagcgca gaggcctcg cgggcaacgg gtcggtggct ggcgcgagac cctcagcgt cagcccttc cagagcctgc agctggtgca tcagctgaag gggctgacg tctgctcta cagcgtcgtg gtggtcgtgg gctggtggg caactgcctg ctggtgctgg tgatcgcgcg ggtgcgccg ctgcacaac tgacgaactt cctcatcgcc aacctggcct tgtccgacgt gctcatgtgc accgcctgog tgcgctcac gctggcctat	Homo sapiens
244	3850	G Protein- Coupled Receptor 10 (GPR10)	NM_004248	atggcctcat cgaccactcg gggcccccagg gtttctgact tatttctggt gctgcgccg A gggttcaaca ctcccgcac caagagcgca gaggcctcg cgggcaacgg gtcggtggct ggcgcgagac cctcagcgt cagcccttc cagagcctgc agctggtgca tcagctgaag gggctgacg tctgctcta cagcgtcgtg gtggtcgtgg gctggtggg caactgcctg ctggtgctgg tgatcgcgcg ggtgcgccg ctgcacaac tgacgaactt cctcatcgcc aacctggcct tgtccgacgt gctcatgtgc accgcctgog tgcgctcac gctggcctat	Homo sapiens

245	3850	G Protein- Coupled Receptor 10 (GPR10)	NP_004239.1	<p>gcttcgagc cagcggtgtg ggtgttcggc ggggctgtt gccacctggt cttcttctctg  cagccgttca ccgtctatgt gtcggtgttc acgtcacca ccacgcagc ggcagcgtac  gtcgtgtgtg tgcaccgct gaggcggtgc atctcgtgc gcctcagcgc ctacgctgtg  ctggccatct gggcgtgtgc cgcgtgtgtg ggcgtgtgtc cgcgtgtgca cactatcac  gtgaggttca agcgcacga cgtgcgtctc tgcgagagt tctgggtgtc ccaggagcgc  cagcgccagc tctacgctg gggcgtgtg cttgctacat accgtctcc tctgctgtgc  atctctctgt cttacgtccg ggtgtcagt aagctcgcga accgctggt gccgggctgc  gtgaccaga gccaggcga ctgggaccgc gtcgggccc ggcgcacct ctgctgtgtg  gtggtgtgtg tgggtgtgtt cgcgtgtgtc tggcgtgtgc tgacgtctt caacctgtg  cgggacctgc accccacgc catcgacct tacgctttg gctggtgtgca gctgctgtgc  cactggctgc ccatgagttc ggcgtgtac aaccttca tctacgctg gctgcacgac  agctccgcg aggagctgc caactgtgt gtcgctgtgc ccgcaagat agcccccat  ggccagaata tgaccgtcag cgtggtcatc tga</p>	Homo sapiens
				<p>MASSTRGPR VSDLFGLPP AVTPANQSA EASAGNSVA GADAPAVTPF QSLQLVHQLK P  GLIVLYSW VVGLVGNCL LVLVIARVR LHNVTNPLIG NLALSDVLMC TACVPLTLAY  AFEPGRWVFG GGLCHLVFFL QPVTYVSVF TLTIAVDY VLVHPLRRR ISRLSAYAV  LAIWALSALV ALPAAVHTYH VELKPHDVRL CEEFWGSQER QRLYAWGLL LVTYLLPLLV  ILLSYVRVSV KLRNRVPGC VTQSQADWDR ARRRRTFCLL VVVVVFVAVC WLPLHVFNLL  RDLDPHAIDP YAFGLVQLLC HWLAMSSACY NPFIYAWLHD SFREELRKL VAWPRKIAPH  GQNTVSVVI</p>	
246	3851	G Protein- Coupled Receptor GPR12	NM_005288	<p>atgaatgaag acctgaaggt caatttaagc gggctgcctc gggattattt agatgccgt A  gctcggaga acatctcggc tgctgtctcc tcccgggttc ctgccgtaga gccagagcct  gagctgtag tcaacccctg ggacattgtc ttgtgtacct cgggaacctt catctcctgt  gaaatgccca ttgtgtctct tctatcttc cacaacccca gctgcgagc acctatgttc  ctgctaatag gcagcctggc tcttgcagac ctgctggcgc gattggact catcaccaat  ttgtttttg cctacctgct tcagtcagaa gccaccaagc tggtcacgat cggcctcatt  gtcgcctctt tctctgctc tgctgcagc ttgctggcta tcactgtga cgcctacctc  tcactgtact acgctctgac gtaccattcg gagaggacgg tcacgtttac ctatgtcatg  ctcgtcatgc tctgggggac ctccattgc ctggggtgc tgcccgctac gggctggaac  tgccctccag acgagtcac ctgcagcgtg gtcagaccgc tcaccaagaa caacggggcc  atcctctcgg tgccttctc cttcatgtt ggcgtcatgc ttcagctcta catccagatc  tgtaagattg tgatgagga cgcctatcag atagcctgc agcaccatt cctggccacg  tcgcactatg tgaccaccgc gaaaggggtc tccacctgg ctatcatctt ggggacgttt  gctgctgtgt gtagtgcctt caccctctat tccctgatag cggattacac ctaccctcc  atctatacct acgccacct cctgccgcg accataaatt ccatcataa cctgtcata  tatgctttca gaaaccaaga gatccagaaa gcgctctgtc tcaattgtg cggctgcatc  ccgtccagtc tcgcccagag agcgcgtcg cccagtgtg ttag</p>	Homo sapiens
247	3851	G Protein- Coupled Receptor GPR12	NP_005279.1	<p>MNEDLKVNLS GLPRDYLDAA AEENISAAVS SRVPAVEPEP LCTSGTLISC P  ENAIIVLIIF HNPFLRAPMF ILIGSLALAD LLAGLGLITN FVFAYLLQSE ATKLVITGLI  VASFSASVCS LLAITVDRYL SLIYALTYHS ERTVTFTYVM LVMLWGTSC LGLLPVMGWN  CLRDESTCSV VRPLTKNNA ILSVSFLFMF ALMLQLYIQI CKIVMRHAHQ IALQHHFLAT</p>	Homo sapiens

248	3852	CX3C Chemokine Fractalkine Receptor 1	NM_001337	SHYVTRKGV STLAIIIGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYNSIINPVI YAERNQEIQK ALCLICGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtcca cgccaggcct tcaccatgga tcagttccct A gaatcagtga cagaaaactt tgagtacgat gattggctg aggcctgtta tatggggagc ctgtgtgtct ttgggactgt gttcctgtcc atatttact ccgtcatctt tgccattggc ctgtgggaa atttgttgtt agtgtttgct ctacacaaca cgaagaagcc caagagtgtc accgacattt acctcctgaa cctggccttg tctgatatgc tgtttgtagc cactttgccc ttctggactc actatttgat aaatgaaaag ggcctccaca atgccatgtg caaattccact accgcttctt tcttcacatgg ctttttttgg agcatattct tcataccgt catcagcatt gataggatcc tggccatcgt cctggccgct aactccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca cgagccattt tgggtggcag accccagttc atgttcacaa agcagaaaaga aaatgaatgc cttgtgtgact acccgaggt ccttcaggaa atctggcccg tgcctcgcaa tgtggaaca aattttcttg gttcctact cccctgtctc attatgagtt attgctactt cagaatcatc cagacgtgtt tttcctgcaa gaaccacaag aaagccaaaag ccattaaact gatccttctg gtggtcatcg tgttttctt cttctggaca ccctacaacg ttatgattt cctggagacg cttaaagctct atgacttctt tcccagtgtg gacatgagga aggatctgag gctggccctc agtgtgactg agacggttg attagccat tgttgctga atcctctcat ctatgcattt gctgggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggctgtcctg tgtggcgct cagtcacagt tgatttctcc tcatttgaat cacaaggag caggcatgga agtgttctga cagcaaat tacttaccac acgagtgatg gagatgcatt gctccttctc tgaagggaat cccaaagcct tgtgtctaca gagaacctgg agttcctgaa cctgatgctg actagtgagg aagatttttg ttgttatttc ttacaggcac aaaatgatgg acccaatgca cacaacaaa ccctagagtg ttgttgagaa ttgtgtctaa aatttgaaga atgaacaaat tgaactcttt gaatgacaaa gagtagacat ttctcttact gcaaatgtca tcagaaactt ttggtttgca gatgacaaaa attcaactca gactagtta gtaaatgag ggtgtgaat attgttcata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL LNLALSDLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSNN RTVQHGVTIS LGVWAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNFLGF LLPLLIMSYC YFRIQTFLFS CMNKKAKAI KLILLVVIVF FLEWTPYNVM IFLETCLKLD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYLHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NPTYHTSDGD ALLLL atggaccacag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcaggg agaccactc ccatgttctt tacactctgt tcttctctcc agtcttttac acagctgtgt tctgactgg agtgcgtggg aacctgttct tcactggagc gttgcatttc aaaccggcga gccgaagact gatcgacatc tttatcatca atctggctgc ctctgacttc atttttcttg tcacattgccc tctctgggtg gataaagaag catctctagg actgtggagg acgggctcct tcctgtgcaa agggagctcc tacatgatct ccgtcaatat gcactgcagt gtcctcctgc tcacttgcac gagtgttgac cgttaoctgg ccattgtgtg gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
249	3852	CX3C Chemokine Fractalkine Receptor 1	NP_001328.1	gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL LNLALSDLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSNN RTVQHGVTIS LGVWAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNFLGF LLPLLIMSYC YFRIQTFLFS CMNKKAKAI KLILLVVIVF FLEWTPYNVM IFLETCLKLD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYLHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NPTYHTSDGD ALLLL atggaccacag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcaggg agaccactc ccatgttctt tacactctgt tcttctctcc agtcttttac acagctgtgt tctgactgg agtgcgtggg aacctgttct tcactggagc gttgcatttc aaaccggcga gccgaagact gatcgacatc tttatcatca atctggctgc ctctgacttc atttttcttg tcacattgccc tctctgggtg gataaagaag catctctagg actgtggagg acgggctcct tcctgtgcaa agggagctcc tacatgatct ccgtcaatat gcactgcagt gtcctcctgc tcacttgcac gagtgttgac cgttaoctgg ccattgtgtg gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
250	3853	G Protein- Coupled Receptor GPR15	NM_005290	gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL LNLALSDLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSNN RTVQHGVTIS LGVWAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNFLGF LLPLLIMSYC YFRIQTFLFS CMNKKAKAI KLILLVVIVF FLEWTPYNVM IFLETCLKLD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYLHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NPTYHTSDGD ALLLL atggaccacag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcaggg agaccactc ccatgttctt tacactctgt tcttctctcc agtcttttac acagctgtgt tctgactgg agtgcgtggg aacctgttct tcactggagc gttgcatttc aaaccggcga gccgaagact gatcgacatc tttatcatca atctggctgc ctctgacttc atttttcttg tcacattgccc tctctgggtg gataaagaag catctctagg actgtggagg acgggctcct tcctgtgcaa agggagctcc tacatgatct ccgtcaatat gcactgcagt gtcctcctgc tcacttgcac gagtgttgac cgttaoctgg ccattgtgtg gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens

251	3853	G Protein- Coupled Receptor GPR15	NP_005281.1	MDPEETSVYL KPGSRRLLDI VLLTQMSVD PYCAEKKATP KIIFIVVAAF IYYIFDSYIR gaaagagaca ctggaacta acactgtttc agtgaagtgc agtatcatgc cccttttaac tatcttcata caagaagaga tataatgact gtacttctgc tcttgccctt acttaaaaaa cacgaccacc ctgacctcaag actgacattt tcataatctc aaggatcatc tttcgctttc caccttcttc acaatttccag cagaaaaagt atgaataata cgtcaatgga ttatcttcat	DYYATSPNS FIINLAASDF RYLAIVWPVV IKLIWSLVAL LVSWLPENTF RAIVHCLCPC aagcagcaat ctttttaaag cagaaaagc ctgaaaaatg ctaccaacaa agctcacatc attggattat accacgtttc cagattcttg acagatctac tgctctataa cctctgctac atctctgaca tttttcttga cttcacggca atcacgctgc ctgatgctgg atgaacctca gctcgagtca ttccgatctg aggttctttc tattctgtat tttaaaaaaa	DIRETHSHVP IFLVTLPWV SRKFRRTDCA ITFCYCCJAR QELAIIVSGLR LKNYDFGSST taaagtacgc caacaaaaa gactttaaac acacagactt gctgtaaaat cagatgaata ttgttaacat ccatctatat gaatgtttta gagctctcac acagatctac cggtgctggc ccgtgcaaa cctctgctac tgctctataa tcactatctc ttcctttgtt ggactgtctaa gggtgcaggt gaacggggga gcacgtgtct gcatgtgtcat gtactgtacg atttcaatcc ataactatca aaaaaaaaa	YTSVFLPVFY DKEASLGLMR YVVCASLWFI IVTCYCCJAR QEHYLPSSAIL ETSDSHLTKA ctccgacgcc gtctaaaaa gaagcaaac acacagactt gacacacctg caaaattgca cactgcatta tggtttttca gcatatgtg gatgaatggc tatgcaaaa agatgaatggc ccaagcattg cagccgaagt gtctggataa agaccagat aaagactcca aacgtgctga aacgtgctga gggtgctact aaagtcaagg aatccctggg tttatgccct aaagtcaagg aatccctggg gaacgtgtct gcatgtgtcat gtactgtacg catcaaatcc cacttcaact agtccttttt ctcttgaaaa aataaattca	NLVLMGALHF YMTSVNMHCS SRELTLLDDK KHNKKLKKSI AFANSCVNPFF ARRRKRVSLS A	Homo sapiens
252	3854	G Protein- Coupled Receptor GPR18	NM_005292	gaaagagaca ctggaacta acactgtttc agtgaagtgc agtatcatgc cccttttaac tatcttcata caagaagaga tataatgact gtacttctgc tcttgccctt acttaaaaaa cacgaccacc ctgacctcaag actgacattt tcataatctc aaggatcatc tttcgctttc caccttcttc acaatttccag cagaaaaagt atgaataata cgtcaatgga ttatcttcat	DYYATSPNS FIINLAASDF RYLAIVWPVV IKLIWSLVAL LVSWLPENTF RAIVHCLCPC aagcagcaat ctttttaaag cagaaaagc ctgaaaaatg ctaccaacaa agctcacatc attggattat accacgtttc cagattcttg acagatctac tgctctataa cctctgctac atctctgaca tttttcttga cttcacggca atcacgctgc ctgatgctgg atgaacctca gctcgagtca ttccgatctg aggttctttc tattctgtat tttaaaaaaa	DIRETHSHVP IFLVTLPWV SRKFRRTDCA ITFCYCCJAR QELAIIVSGLR LKNYDFGSST taaagtacgc caacaaaaa gactttaaac acacagactt gctgtaaaat cagatgaata ttgttaacat ccatctatat gaatgtttta gagctctcac acagatctac cggtgctggc ccgtgcaaa cctctgctac tgctctataa tcactatctc ttcctttgtt ggactgtctaa gggtgcaggt gaacggggga gcacgtgtct gcatgtgtcat gtactgtacg atttcaatcc ataactatca aaaaaaaaa	ctccgacgcc gtctaaaaa gaagcaaac acacagactt gacacacctg caaaattgca cactgcatta tggtttttca gcatatgtg gatgaatggc tatgcaaaa agatgaatggc ccaagcattg cagccgaagt gtctggataa agaccagat aaagactcca aacgtgctga aacgtgctga gggtgctact aaagtcaagg aatccctggg tttatgccct aaagtcaagg aatccctggg gaacgtgtct gcatgtgtcat gtactgtacg catcaaatcc cacttcaact agtccttttt ctcttgaaaa aataaattca	A	Homo sapiens

253	3854	G Protein- Coupled Receptor GPR18	NP_005283.1	<p>MITLNNQDQP VPENSSHPDE YKIAALVFYS CIFIIGLFVN ITALWVFSC TKKRTVTIY P</p> <p>MMNVALVDLI FIMTLPERME YYAKDEWPFPG EYFCQILGAL TVFYPSIALW LLAFISADRY</p> <p>MAIVQPKYAK ELKNTCKAVL ACVGWIMTL TTTTPLLILY KDPDKDSTPA TCLKISDIIY</p> <p>LKAVNVLNL RLTFEFLIPL FIMIGCYLVI IHNLLHGRS KLKPKVKEKS IRIITLLVQ</p> <p>VLVCFMPEFI CFAFLMLGTG ENSYNPWGAF TTFMLNLSTC LDVILYYIVS KQFOARVISV</p> <p>MLYRNYLRSM RRKFSRSGSL RSLSNINSEM L</p>	Homo sapiens
254	3855	G Protein- Coupled Receptor GPR19	NM_006143	<p>aattaagaga aaaaaagtga atatgggttt tgctcacaga atggataaca gcaagccaca A</p> <p>tttgattatt cctacacttc tgggtgcccc ccaaaacccg agtgcactg aaacagccac</p> <p>acctctgcca agccaatacc tgatggaatt aagtggaggag cacagttgga tgagcaacca</p> <p>aacagacctt cactatgtgc tgaaaacccgg ggaagtggcc acagccagca tctctttgg</p> <p>gattctgtgg ttgttttcta tctctggcaa tctctgggtt tggttggtca tccataggag</p> <p>taggaggact cagttctacca ccaactactt tgggtgttcc atggcatgtg ctgaccttct</p> <p>catcagcgtt gccagcacgc ctttctgctt gctccagttc accactggaa ggtggacgct</p> <p>gggtagtcca acgtgcaagg ttgtgcgata ttttcaatat ctcactccag gtgtccagat</p> <p>ctacgttctc ctctccatct gcatagaccg gttctacacc atcgtctatc cctgagcgtt</p> <p>caaggtgtcc agagaaaaag ccaagaaaaat gattgcggca tctgtgatct ttgatgcagg</p> <p>ctttgtgacc cctgtgctct ttttctatgg ctccaaactgg gacagtcatt gtaactattt</p> <p>cctccccctc tcttggaag gcactgccta cactgtcatc cacttcttgg tgggctttgt</p> <p>gattccatct gtctccataa ttttatatta ccaaaaggct ataaaaataa ttggagaat</p> <p>aggcacagat ggccgaacgg tgaggaggac aatgaacatt gtccctcgga caaagtga</p> <p>aactatcaag atgttcttca ttttaaatct gttgttttgg cctctctggc tgccttttca</p> <p>tgtagctcag ctatggcacc cccatgaaca agactataag aaaagtctcc ttgttttcc</p> <p>agctatcaca tggatatcct ttagttcttc agcctctaaa cctactctgt attcaattta</p> <p>taatgccaat tttcggagag ggaatgaaga gacttttggc atgtcctcta tgaatgttta</p> <p>ccgaagcaat gcctatacta tcacaacaaag ttcaaggatg gccaaaaaaa actacgttgg</p> <p>catttcagaa atcccttcca tggccaaaac tattaccaaa gactcgatct atgactcatt</p> <p>tgacagagaa gccaaaggaaa aaaagcttgc ttggcccatc aactcaaatc caccataatc</p> <p>ttttgtctaa gttctcattc ttcaattgt tatgcaccag agattaaaaa gctttaacta</p> <p>taaaaacaga agctatttct atattgtttt tcaactcaact ttccaaaggga aatgttttat</p> <p>tttgtaaaat gcattcattt gtttactgt</p>	Homo sapiens
255	3855	G Protein- Coupled Receptor GPR19	NP_006134.1	<p>MVFAHRMDNS KPHLIPTLL VPLQNRCTE TATPLPSOYL MELSEHSWM SNQTDLHYVL P</p> <p>KPEVATASI FFGILWLFSI FGNSLVCLVI HRSRRTQSTT NYFVSMACA DLLISVASTP</p> <p>FVLLQFTGR WTLGSATCKV VRYFYLTTPG VQIYVLLSIC IDRFTIIVP LSFKVSREKA</p> <p>KKMIAASWIF DAGEVTPVLF FYGSNWDSHC NYFLPSSWEG TAYTVIHFLV GFVIPSVLII</p> <p>LFYQKVIKVI WRIGTDGRV RRTMNIIVPT KVKTIKMFLLI INLLFLLSWL PFHVAQLMHP</p> <p>HEQDYKKSSL VFTAITWISF SSSASKPTLY SIYNANFRG MKETFCMSSM KCYRSNAYTI</p> <p>TTSSRMAKN YVGISEIPSM AKTITKDSIY DSFDREAKE KLAWPINSNP PNTFV</p>	Homo sapiens
256	3856	G Protein- Coupled Receptor GPR2/CCR10	NM_016602	<p>agagatgggg acggagcgcca cagagcagggt ttcctggggc cattactctg gggatgaaga A</p> <p>ggacgcatac tcggctgagc cactgcccga ccttctgtac aagcccgatg tccaggcctt</p> <p>cagccggggc ttccaaacca gtgtctccct gaccgtggct gcgctgggtc tggccggcaa</p> <p>tggcctggct ctggccaccc acctggcagc ccgacgcgca gcgctctgc ccacctctgc</p>	Homo sapiens



257	3856	G Protein- Coupled Receptor GPR2/CCR10	NP_057686.1	<p>ccacctgtctc cagctggccc tggccgacct cttgtgtgcc ctgactctgc ccttcgaggc</p> <p>agcaggggct cttcagggct ggagtctggg aagtgcacc tgcgcacca tctctggcct</p> <p>ctactcggcc tcttccacg cggcttctt cttctggcc tgtatcagc cgcacgcta</p> <p>cgtggccatc ggcgagcgc tcccagccg gcccgggcc tccactccc gccgcgaca</p> <p>cttggtctcc gtcategtgt ggctgctgtc actgctctg cgctgctg cgtgctctt</p> <p>cagccaggat ggcgagcgg aagcccaac acgctgtgc ctcattctcc cgcaggcct</p> <p>cacgcagac gtgaagggg cagcgccgt ggccaggtg gccctgggt tgcgctgcc</p> <p>gctgggctc atgtagcct gctacgcgt tctggccgc acgtgctgg cgcacgggg</p> <p>gcccagcgc cggcgtgcg tgcgctcgt ggtgctctg gtggcgcc tctgtgtgt</p> <p>gcagctccc tacagcctg cctgtctgt ggatactgc gatctactg ctgcgcgca</p> <p>gcggagctgc cctgccagca aacgaagga tgcgcactg ctggtgacca gggcttggc</p> <p>cctgcgccg tgtggcctc atccgttct ctacgcttc ctggccctg gcttcgcca</p> <p>ggacctcgg agctgtctc ggggtggag ctgcctca cgcctcaac cgcgcgcgg</p> <p>ctgccccgc cggccccgc tttctcctg ctacgctcc acggagacc acagtctctc</p> <p>ctgggacaac taggctgcg aatctagag agggggcag ctgaggtgc tggaaagg</p> <p>gagtaggtgg ggaacactg agaaagagg agggacctaa agggactacc tctgtgctt</p> <p>gccacattaa attgataaca tggaaatgaa aaaaaaaa aaaa</p>	Homo sapiens
258	3857	G Protein- Coupled Receptor GPR20	NM_005293	<p>atgccctctg tgtctccag gggggccctg gccggggcag tccccaatgc caccgactg A</p> <p>acaacagtgc ggaccaatgc caggggctg gaggtgccc tgttccacct gtttgcggg</p> <p>ctggacgagg agctgcatg caccttccc ggcctgtgc tggcgctgat ggcgtgcac</p> <p>ggagccatct tctggcag gctggtctc aacgggtgg cgtgtactg cttctgtgc</p> <p>cgcacccggg ccaagacac ctacgtcatc tacacctca acctggtgt gaccgatcta</p> <p>ctggtaggc tgctcctgc cagcgcttc cctgtgtact acggcgccag ggcgtgctg</p> <p>cgtgtgctt tcccgacgt cctcggttac tctctcaaca tgcactgctc cactctctc</p> <p>ctcacctgca tctgctgga ccgtacctg gccatctgc ggcgcgaag tccgcgcgc</p> <p>tgcgcagc ctgctgtgc cagggccgtg tgcgcttgc tgtgctggc cgcgggtgc</p> <p>gtcacctgt cggctgtgg cgtgacagg accggccct gctgcctgt ctttgcgtg</p> <p>actgtcctgg agttcctgt gccctgctg gtcatecag tgtttaccg cgcgatcatg</p> <p>tgtgactgt cgcggccgg tctgtctcc caggtgtgc agcgccgtg cgcggccatg</p> <p>cagctcctgc tcacggtgt ctcattctt cctgtctgt tcacgctt ccagccgc</p> <p>caagtggcc tggcgtgtg gccgacatg ccacaccaca ctagcctgt ggtctaccac</p> <p>gtggccgtga cctcagcag cctcaacagc tgcattggacc ccatctcta ctgtctgtc</p> <p>accagtgtt tccaggccac cgtccaggc cttctggcc agcacggaga gcgtgagccc</p> <p>agcagcgggt acgtgggtcag catgcacagg agtcccaagg gctcaggccc tcatcacatc</p>	Homo sapiens

259	3857	G Protein-Coupled Receptor GPR20	NP_005284.1	ctcagtgccg gccctcacgc cctcacccag gccctggcta atggggcccg ggccttag	Homo sapiens
260	3858	G Protein-Coupled Receptor GPR21	NM_005294	atgaactcca ccttgatgg taatcacagc agccaccct ttgacctctt ggcatctggc A tatttggaac ctgtcaatt ttgacctttg gaagtattga ttattgtctt tctaaactgta ttgattatt ctggcaacat catgtgatt ttgtatttc actgtgcacc ttgttgaac catcacacta caagtatttt tatccagact atggcatatg ctgacctttt tgttggggtg agctgcgtgg tcccttcttt atcaactctc catcaccccc ttccagtaga ggagtccttg acttgccaga tatttggttt ttagtatca gtctgaaga gcgtctccat gcttctctg gcctgtatca gcattgtag atacattgcc attactaac cttaacctc taatactctg gttacacct ggagactacg cctgtgatt ttctgattt ggctatactc gacctgggtc ttcctgcctt cctttttcca ctggggcaaa cctggatatac atggagatgt gtttcagtg tgtgcggagt cctggcacac cgactcctac ttacacctgt tcatcgtgat gatgtatat gccccagcag ccttattgt ctgcttcaac tatttcaaca tcttccgcat ctgccaacag cacacaaagg atatcacga aaggcaagcc cgcttcagca gccagagtgg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgtttcgaat cactagtga ttttacatcc tctggtgcc atatatcat tactcttgt tggaaagctc cactggccac agcaaccgtc tgcacacct ctbgaccacc tggcttgcta ttagtaaac tttctgcaac tgtgtaatt atagctctc caacagtga ttccaaaag gactaaagc ccttcaggg gctatgtga cttctgtgc aagtcagact acagccaacg accttacac agttagaagc aaaggccctc ttaatggatg tcatatctga	Homo sapiens
261	3858	G Protein-Coupled Receptor GPR21	NP_005285.1	MNSTLDGNQS SHPCLLAGF YLETVNFCLL EVLIIVFTV LIISGNIIVI FVFHCAPLLN P HHTTSYFIQT MAYADLFVG SCVPSLSLL HHPLPVEESL TCQIFGFVVS VLKSVSMASL ACISIDRYIA ITKPLTYNTL VTPWRRLCI FLIWLSTLV FLPSFFHWGK PGYHGDVFEQW CAESWHTDSY FTLFIVMMLY APAALIVCFY YFNIFRICQO HTKDISERQA RFSSQSGETG EVQACPKRY AMVLFRTSV FYILWLPYII YFLESSTGH SNRFASFLT WLAISNSFCN CVIYLSNSV FORGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI	Homo sapiens
262	3859	G Protein-Coupled Receptor GPR22	NM_005295	atgtgttttt tcccattct ggaatacaac atgcagctcg aatctaacc tacagtcgca A gatgacattg atgacatcaa caccaatag taccacacc tatcatatcc gtaagcttt caagtgtctc tcaccgatt tcttatgta gaaattgtgt tgggacttgg cagcaacctc actgtattgg tactttactg catgaaatcc aacttaata actctgtcag taacattatt acaaatgaac ttcatgtact tgaatgaata atttgtgtgg gatgtattcc tctaaactata gttatcttc tgttttact ggagagtaac actgctctca ttgtgtgtt ccatgaggct tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgtatcac ttggaacaga tatgacatct ctgtaaaacc tgcaaaccca attctgacaa tgggcagagc tgtaattgta atgatatcca ttgtgatttt ttcttttttc tctttctcga ttctttttat tgaggtaaat	Homo sapiens

263	3859	G Protein- Coupled Receptor GPR22	NP_005286.1	<p>tttttcagtc ttcaaaagtgg aaataccttg gaaaacaaga cacttttatg tgtcagtaca  aatgaatact acactgaact gggaatgtat tatcacctgt tagtacagat cccaatattc  tttttcactg ttgtagtaat gttatcaca tacaccaaaa tacttcaggc tcttaattat  cgaataggca caagattttc aacaggcag agaaagaaga caagaaaga aaagacaatt  tctctaacca cacaacatga ggtacagac atgtcacaaa cagtggtggg gagaatgtga  gtctttgggtg taagaacttc agttctgtg ataattgcc tccggcgagc tgtgaaacga  caccgtgaac gacgagaaag acaaaagaga gtcttcagga tgtctttatt gattattct  acatttctc tctgctggac accaatttct gtttaata ccaccatttt atgtttaggc  ccaagtgaac ttttagtaaa attaagattg tgttttttag tcatggctta tggaacaact  atatttcacc ctctattata tgcattcaat agacaaaaat ttcaaaaggc cttgaaaagt  aaaatgaaaa agcgagttgt ttctatagta gaagctgac cctgcctaa taatgctgta  atacacaaact cttggataga tcccaaaaga acaaaaaa ttaccttga agatagtga  ataagagaaa aacgtttagt gccacaggtt gtcacagact ag</p>	Homo sapiens
264	3860	G Protein- Coupled Receptor SLC/MCH1	NM_005297	<p>IREKRLVPQV VTD  atgttgtgtc cttcaagac agatggctca gggcactctg gtaggattca ccaggaaact A  catgtgagaag gtaaaaggga caagattagc aacagtgaag ggaggagaa tgggtggaga  ggattccaga tgaacggtgg gtcgctggag gctgagcatg ccagcaggat gtcagttctc  agagcaaaag ccattgtcaaa cagccaacgc ttgtctcttc tgtccccagg atcacctct  cgacaggga gcatctccta catcaacatc atcatgcctt cgggtgttcgg caccatctgc  ctcctgggca tcatcgggaa ctccaacggtc atcttcgagg tctggaagaa gtccaagctg  cactggtgca acaacgtccc cgacatcttc atcatcaacc tctcggtagt agatctctc  ttctcctgg gcatgcctt catgatccac cagctcatgg gcaatggggt gtggcacttt  ggggagacca tgtgcacct catcacggcc atggatgcca atagtcaagt caccagcacc  tacatcctga ccgccatggc cattgaccgc tacctggcca ctgtccaccc catctctcc  acgaagtcc ggaagccctc tgtggccacc ctgggtgatc gccctctgtg ggccctctcc  ttcatcagca tcacccctgt gtggctgtat gccagactca tccccctccc aggaggtgca  gtgggtgcg gcatacgct gcccaaccca gacactgacc tctactggtt caccctgtac  cagtttttcc tggcctttgc cctgcctttt gtggtcatca cagccgcata cgtgaggatc  ctgcagcgca tgacgtcctc agtggccccc gcctcccagc cagcatccg gctgcggaca  aagaggtgta cccgcacagc catcgccatc tgtctggtct tctttgtgtg ctgggacccc  tactatgtgc tacagctgac ccagttgtcc atcagccgct cgacctcac ctttgtctac  ttatacaatg cggccatcag cttgggctat gccaacagct gcctcaaccc ctttgtgtac  atcgtgctct gtgagcgtt ccgcaaacgc ttggtcctgt cgggtgaagcc tgcagccag  gggcagcttc gcgctgtcag caacgctcag acggtgacg aggagaggac agaaagcaaa</p>	Homo sapiens

265	3860	G Protein- Coupled Receptor SLC/MCH1	NP_005288.1	ggcacctga MLCPSKTDGSGHSGRIHQET HGEGRDKIS NSEGRENGGR GFQMGSGSLE AEHASRMSVL P RAKPMNSQR LLLSPGSPF RTGISYINI IMPSVFGTIC LLGIIGNSTV IFAVVKSKSL HMCNNVPDIF IINLSVVDLL FLGNPFMIH QLMGNVWHF GETMCTLITA MDANSQFTST YILTAMADR IYATVHPIS TKFRKPSVAT LVICLLWALS FISITPWLY ARLIPFGGA VCGGIRLPNP DTDLYWETLY QFFLAFLPF WVITAAYVRI LQRMSTSSVAP ASQSRIRLRT KRVTRTAIAI CLVFFVCWAP YVVLQTLQLS ISRPTLTFVY LYNAAISLGY ANSCLNPFVY IVLCETFRKR IIVLSVKPAAQ GQLRAVSNAQ TADEERTESK GT	Homo sapiens
266	3861	G Protein- Coupled Receptor GPR25	NM_005298	atggccccca cagagccctg gagccccagc ccggggtcag cgccctggga ctactcgggg A ttggacggcc tggagagct ggagctgtgt ccggccgggg acctgcccta cggctacgtc tacatccccg cgctctacct ggcggccttc gccgtgggcc tggctggcaa cgcctttgtg gtgtggctgc tggccgggag cttcgtgtgc cgggggcccg cggcggtggt tggatacctt cgtgctgcac ctggcgggcag ctgacctggg cttcgtgtgc acgtgcgcgc tgcaagctca tggggccgc ggcggcggt aggcgccgt ggccgttcgg cgtgctggcg gccatgagcg tggacctga cgtggttcgc cgtggcggtg acgcgctcg ccggcgcgct cgtgctggcg gccactgcgc accccgcgct ggccctggc ctcgtgtgc gtgaagctgc tcgagcgag cgtggcgct gctggcgcc cgtgccctcc tggctaccg ggggttgcaag ggcgtctgg ccgtggcgct cagccagtg cagccagtg cgtgctggcg cctccacgc cttccaggc ccctgcccgt gggccaggga cagccagtg cgtgctggcg cgtgctggcg cgtgctggcg cctctctgc ctcagcttc tggctgtgt gctgaccttc cgtgctggcg cgtgctggcg cgtgctggcg cgtgctggcg tactgcgca tctgcgcg cctgcgagc cgtgcgagc cgtgcgagc cgtgcgagc cgtgcgagc tcgctgcga tcatcttc ccatcttc ccatcttc ccatcttc ccatcttc ccatcttc ccatcttc gccctggcg ccgtcttcca cctggcgcg cctggcgcg cctggcgcg cctggcgcg cctggcgcg cgtgctggcg tggctggcg cctgacctt cctgacctt cctgacctt cctgacctt cctgacctt gccacccgc tcatctacct cctgctggc cctgctggc cctgctggc cctgctggc cctgctggc gcctggcg ccacggcg cctggcgcg cctggcgcg cctggcgcg cctggcgcg cctggcgcg gacgacagt cgtgttcg tggccggcg cgtgctggc cgtgctggc cgtgctggc cgtgctggc tag	Homo sapiens
267	3861	G Protein- Coupled Receptor GPR25	NP_005289.1	MAPTEPWSPS PGAPWDYSG LDGLELELC PAGDLPYGV YIPALYLA AFVLLGNFAV P WLLAGRRGP RRLVDTFVLH LAAADLGFVL TLPLWAAAAA RRPWPFQDGL CKLSTFALAG TRSAGALLA GMSVDRYLAV VKLLEARPLR TPRCAVASCC GWAVALLAG LPSLYRGLQ PLPGGQDSQC GEEPSHAFQG LSLLLLLLTF VLPVLTFLC YCRISRRRLR PPHVGRARRN SLRIIFAIES TFVGSWLFPF ALRAVFLAR LGALPLCPPL LLALRWGLTI ATCLAFVNSC ANPLIYLLLD RSFRARALDG ACGRTGRLAR RISSASSLSR DDSSVFRCA OAANTASASW atgatgtggg gtgcaggcag ccctctggc tggctctcag ctggctcagg caactgaat A gtaagcagc tggggccagc agaggggcc acaggtccag ccgcaccact gccctgcct aaggcctgg atgtgtgtgt ctcgacttca ggcacccctg tggctggcga gaatgcgcta gtgtggcca tcatcgtggg cactcctgc ttcctggcc ccatgttct cgtggtggc agcctggcg tggcagacct cgtggcagg cgtggcagg cgtggcagg cgtggcagg cgtggcagg ttctgcatc gtcagcga gatgagcgt gtgtgtgtg cgtgctggc aatggcctt accgcccga tggcagctt actggccat actgtcgac cgtgctgtt cgtgctgtt cgtgctgtt	Homo sapiens
268	3862	G Protein- Coupled Receptor GPR3	NM_005281	atgatgtggg gtgcaggcag ccctctggc tggctctcag ctggctcagg caactgaat A gtaagcagc tggggccagc agaggggcc acaggtccag ccgcaccact gccctgcct aaggcctgg atgtgtgtgt ctcgacttca ggcacccctg tggctggcga gaatgcgcta gtgtggcca tcatcgtggg cactcctgc ttcctggcc ccatgttct cgtggtggc agcctggcg tggcagacct cgtggcagg cgtggcagg cgtggcagg cgtggcagg cgtggcagg ttctgcatc gtcagcga gatgagcgt gtgtgtgtg cgtgctggc aatggcctt accgcccga tggcagctt actggccat actgtcgac cgtgctgtt cgtgctgtt cgtgctgtt	Homo sapiens

269	3862	G Protein- Coupled Receptor GPR3	NP_005272.1	gacctcacct actattcaga gacacacagt gacacggacct atgtgatgct ggccttagtg tgggaggtg ccctgggacct ggggtgctg cctgtgctg cctggaaactg cctggatggc ctgaccacat gtggcggtgt ttatccactc tccaagaacc atctggtagt tctggccatt gccttctca tgggtgttg catcatgtg cagctctacg ccaaatctg ccgcatcgtc tgccgccatg cccagcagat tgcccttcag cggcactgc tgcctgcctc ccaatagtg gccacccgca agggcattg cacactggcc cctgtgctg ggcctttgc cgcctgtgg ttgcccttca ctgtctactg cctgtgggt gatgcccact ctcacacct ctacacctat ctacactgc tccctgccac ctacaactc atgataacc ctatcatcta cgccttcgc aacaggatg tgcagaaagt gctgtgggt gctgtgctg gctgttcctc ttccaagatc ccctccgat cccgctccc cagtgtgct tag	Homo sapiens
270	3863	G Protein- Coupled Receptor GPR31	NM_005299	WAIIVGTPA WLSAGSGNVN VSSVGPAGP TGPAAPLSP KAWDVVLICIS GTLVSCENAL P TASIGSLAI TVDRYLSLYN ALTYSETTV TRTYMLALV WGGALGLGLL PVLAWNCLDG LTTCGVVYPL SKNHLVLA I AFFMVFIML QLYAQICRIV CRHAQIALQ RHLLPASHYV ATRKGIATLA VVLGAFAACW LPFTVYCLLG DAHSPLYTY LTLPATYNS MINPIIYAFR NQDVQKVLWA VCCCCSSKI PFRSRSPSDV atgccattcc caaactgctc agccccagc actgtgtgtg ccacagctgt ggtgtgtctg A ctggggctg agtgtgggt ggtgtgctg ggaacgcgg tggcgctgtg gacctctctg ttccgggtca ggtgtggaa gccgtacgt gtctacctg tcaacctggc cctggctgac ctgtgttg ctgctgctc gcttctctg cgcctctc accctgacct ccaggctgg catctggcc gtgtgggtg ctgggcccgt cgtggcttg gaccgtacc tccgtgtgtg ccagcgtg gggatggct tctggccgc cgtcaggcg cctcaggcg cctcggggg tctcgggct cgtcggctc cttaaggctc acctgtgtc cctcacctg cccgggctg ctcatctg agccgcacca gaactccac ctgatgtg cctctactc cagggcagac ggtccttca gcatcatctg gcaggaaaga ctctcctg ttcagttgt cctcccttt ggcctcatg tgtctgcaa tgcaggcatc atcagggtc tccagaaaag actccggag cctgagaaac agccaaagt tcagcgggccc caggcactg tccactgtg ggtgtgtg tttgtctgt gcttctgtc ctgctctctg gccagagtc tgatgcacat cttccagaat ctggggagct gcagggccct ttgtgcagtg gtcctacct cggatgtcac gggcagctc acctacctg acagtgtct caacccgtg gtatactgt tctccagccc cacttcagg agctcctatc ggagggtctt ccacacctc cgaggcaag ggcaggcagc agagccccc gattcaacc ccagagactc ctattcctga MPFNCSPS TVATAVGL LGLEGLGLL GNAVALWTF FRVRWKPYA VYLLNALAD P LLLAACLPL AAFYLSLQAW HLGKVCWAL RFLDLRSV GMAFLAAVAL DRYLRVHPR LKVNLSQA ALGVSLVWL LMVALTCPGL LISEAAQNST RCHSFYSRAD GSFSLIWEA LSCLQVLPF GLIVFCNAGI IRALQRLRE PEKQKLQRA QALVTLVWL FALCFLPCFL ARVLMHIFQ NLGSRALCAV AHTSDVTGSL TYLHVVNPV VYCFSSPTFR SSYRRVFHTL RGKQAAEPP DFNPRDSYS	Homo sapiens
271	3863	G Protein- Coupled Receptor GPR31	NP_005290.1	gagggaggtg ccctgggacct ggggtgctg cctgtgctg cctggaaactg ggccttagtg ctgaccacat gtggcggtgt ttatccactc tccaagaacc atctggtagt tctggccatt gccttctca tgggtgttg catcatgtg cagctctacg ccaaatctg ccgcatcgtc tgccgccatg cccagcagat tgcccttcag cggcactgc tgcctgcctc ccaatagtg gccacccgca agggcattg cacactggcc cctgtgctg ggcctttgc cgcctgtgg ttgcccttca ctgtctactg cctgtgggt gatgcccact ctcacacct ctacacctat ctacactgc tccctgccac ctacaactc atgataacc ctatcatcta cgccttcgc aacaggatg tgcagaaagt gctgtgggt gctgtgctg gctgttcctc ttccaagatc ccctccgat cccgctccc cagtgtgct tag	Homo sapiens
272	3864	G Protein- Coupled Receptor	NM_005282	ccacattgccc tgaacttccc aacactccct agctgcgctg tgtcctatct caacactcc tcatgtattt cttgtgtctt ctagaacatt cccccccat tattacttca atgtggctac	Homo sapiens

GPR4

acatacttcc taattgcct gcaaacaccatc tccttctcâc cattgcccag cgatgcttcc  
gtctctccca taaacactcc cggagaccacaa tttttgtgtc acccccatatc tccctggttg  
acacactgac tccatacata accctcttga aaaactctct tattaacttc accatctctc  
agacttccct cctgtcataa ttccatccct tcccaactt tccctctca agcttgccc  
ttcccagccc agcccagcct acccaacctc atctcttccc ttagagaccac atcccaccat  
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ccccacagcc cccgtggcc aggggaagcg ccccaagaag cgaagtgcac accatgggca  
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ggatccacgg ccccggtcc tgaagctct tgggttcat ctctacacc aatatctaca  
tcagcatcgc ctctctgtgc tgcactcgg tggaccgcta cctggctgtg gccaccacac  
tccgcttcgc ccgcctgcgc cgcgtcaaga ccgcctggc cgtgagctcc gtggtctggg  
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agcggctggc cctcagcctc atcgccatcg tctgtgtctg ctttgcgcc tatcactgc  
tctgtctgc ccgcagcgc atcactcgtt gccgccccg ggaactgcggc ttcgagagc  
cgctcttttc tgcataccac agctcactgg ctctaccag cctcaactgt gtggcgagcc  
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tggagacccc actcactcc aagaggaaac gcacagccaa agccatgact ggcagctggg  
cgccactcc gccctcccag ggggaccagg tgcagctgaa gatgctgccg ccagcacaat  
gaaccccgag tggcacagaa tcccagttt tcccctctca tccacagtc ccttctctcc  
tggctctggt tatgcaaat gtatggaata agggctgtgt taatatctat aagaatacaa  
gaacttagga agagtgggt tgggtgtctca ctggtcaacc tttgtgctcc cagatcccat  
cacagtttgg cgatttgga gggcctcctg aaggaggaga ttagtaataa tattttttg  
gagacagggt ctactgtgt tggccaggct ggagtgcagt agtgcagtcg tggctcactg  
cagcctccac ctctgggct ctccagcgt ctcccacat cagcctccc agtagctggg  
accacaaatg tgaagccacc catgctggc taattttgt actttttgta taaatggagt  
ctcactatgt ttcccaggc tgaattgaa ctctgggct caagagatcc tctgctctg  
gcctcccaaa gtgctcagat tagagatgtg agccgccatg tctggccaga taaatgaagt  
caaacatttg gtttccagaa aataagaca aatagagaag gttagatttt ttttttcca  
caaagtggat aaaagtctgt gactcggggg gactcgggag gagaatgca gccgatatag  
agtcattatg ttgcaaaag ccttggtcat acaggccagg gaacataaga ccgcaattct  
aagtttctag ataaacagc atctcaagt caagactgag gatgaagagg cgaatgtca  
gaactcaagt gaaggcaat cagggcagac tgcctggagg agtgatgcca gaaggtttgg  
gaagaagggt tgggacaaga agaaagggt tttattcatt cattcaacag aggtttatgt  
agggcactgt gctgggtggg gctggggaca caacaatgac tgaggcagcc tggccttgcc

273	3864	G Protein- Coupled Receptor GPR4	NP_005273.1	ttcacaggcg tcaccatata caagtaataata aaaaaatatgt aatgttttga attgct MGNHTWEGCH VDSRVDHLFP PSLYIFVIGV GLPTNCLALW AAYRQVQQRN ELGVYLMNLS P IADLLYICTL PLWVDYFLHH DNWTHGPGSC KLFGFIFVTN IYISIAFLCC ISVDRLAVVA HPLRFARLRR VKTAVAVSSV VWATELGANS APLFHDLEFR DRYNHTFCFE KFPMEGWVAV MNLRYRVFGE LFPWALMLLS YRGILRAVRG SVSTERQEK A KIKRLALS LI AIVLVCFAPY HVLNLSRSAL YLGRPWDCGF EERFSAVHS SLAFTSINCV DIPILYCLIN EGARSDDVAKA LHNLRLFLAS DKPQEMANAS LTLETPLTSK RNSTAKAMTG SWAATPPSQG DQVQLKMLPP AQ	Homo sapiens
274	3866	G Protein- Coupled Receptor GPR6	NM_005284	atgaacgcga gcgcgcctc gctcaacgac tccaggtggg tggtagtggc ggccgaagga A gcgcgcgcgc gcgcacagc agcagggggg cggacacgg gcgaatgggg acccctgct gcgcgcgcgc taggagccgc cggcggagct aatgggtctc tggagctgtc ctgcagctg tcggctgggc caccgggact cctgctgcca gcggtgaatc cgtgggacgt gctcctgtgc gtgtcgggga cagtgatcgc tggagaaaac gcgctggtgg tggcgtcat cgcgtccact ccgcgcgtgc gcacgcccac gtctgtgctg ttaggcagcc tggccaccgc tgacctgttg gcgggcgttg gcctcatctt gcactttgtg ttccagtact tgggtgccct ggagactgtg agtctgctca cgttgggctt cctcgtggcc tctctgcgc tctctgtcag cagcctgctg gccattacgg tggaccgcta cctgtccctg tataacgcgc tcacctatta ctgcgcgcg accctgttgg gcgtgcacct cctgcttgcc gccacttggg cngtgcctt aggcctgggg ctgctgcccc tgctgggctg gaactgcctg gcagagcgc cgcctgcag cgtggtgcgc ccgctgggc gcagccacgt ggcctgtctc tccgcgcct tcttcattgt cctcgcctc atgctgcacc tgtagctgc catctgccag gtggtctggc gccacgcga ccagatcgcg ctgcagcagc actgcctggc gccaccccat ctgcctgcca ccagaaaagg tgtgggtaca tggctgtgg tgctgggca tttcggcgcc agctggctgc ccttcgccat ctattgcgtg gtgggcagcc atgaggacc ggcgtgtctac acttacgcca cctgctgcc cgcacactac aactccatga tcaatcccat catctatgcc ttcgcgaacc aggatccca gcgcgcctg tggtcctgc tctgtggctg tttccagtcc aaagtgcct ttcgttccag gtctccagc gaggtctga	Homo sapiens
275	3866	G Protein- Coupled Receptor GPR6	NP_005275.1	MNASASLND SQVVVAEG AAAATAAGG PDTGEMGPPA AAALGAGGGA NGSLELSSQL P SAGPPGLLP AVNPDVLLC VSGTVIAGEN ALVVALIAST PALRTPMFVL VGSLATADLL AGCGLIHV FQYLPSETV SLLTVGFLVA SFAASVSSL AITVDRLSL YNALTYSSRR TLIGVHLLA ATWTVSIGL LLPVLGNCL AERAACSVVR PLARSHVALL SAAFFMVFGI MLHLYVRICQ VWRHAHQIA LQHCILAPPH LAATKRGVGT LAWLGTFGA SWLPFAIYCV VGSHEPAVY TYATLLPATY NSMINPIYA FRNQEIQRAL WLLLCGCFQS KVPFRSRSPS EV	Homo sapiens
276	3867	G Protein- Coupled Receptor GPR7	NM_005285	atggacaacg cctcgttctc ggagcccttg cccgccaacg catcggggcc ggaccggcg A ctgagctgct ccaacgcgtc gactctggcg ccgctgcgg gcgcgtgga ggtgctgta ccagttgtct acgcgtgat ctgcgcctg ggtctggcg gcaactccgc cgtgctgtac gtgtgtgctg gggcgcccc catgaagacc gtcaccaacc tggatccct caacctggcc atcgccgacg agctcttccac gctgggtgctg cccatcaaca tcgccgactt cctgctgcg cagtgccct tcggggagct catgtgcaag ctcatcgtgg ctatcgacca gtacaacacc	Homo sapiens

277	3867	G Protein- Coupled Receptor GPR7	NP_005276.1	<p>ttctccagcc ttacttctct caccgtcaatg agcgccgacc gctacctggt ggtgttgccc  actgaggagt cgcgcccgggt ggcggccgc acctacagcg ccgcccgcgc ggtgacctg  gccgtgtggg ggatcgtcac actcgtcgtg ctgcccttcg cagttctcgc ccggctagac  gacgagcagg gccggcgcca gtgcgtgcta gtctttccgc agcccagggc cttctggtgg  cgcgagcagg gccctacac gtccgtgctg gtccgtgcca tcccgtgtc caccatctgt  gtcctctata ccacctgct gtgcgggctg ctgcccagtc ggctggacag ccacgccaag  gccctggagc gcgccaagaa gcgggtgacc ttccgtggtg tggcaatcct gcggtgtgc  ctcctctgct ggacgcctta ccacctgagc accgtggtgg cgctcaccac cgacctccg  cagacgcgc tggtcacgc tatctctac ttcatcaca gctgacgta cgccaaacgc  tgcctcaacc ccttctctta cgccttctg gagccagct tccgcaggaa cctccgccag  ctgataaact gccgcgggc agcctga</p>	Homo sapiens
278	3868	G Protein- Coupled Receptor GPR8	NM_005286	<p>VLLRAPRMKT VTNLFILNLA IADELFTLVL PINIADFLR QWPFGEIMCK LIVAIQXNT  FSSLYFLTM SADRYLVVLA TAESRRVAGR TYSAARAVSL AVWGIVTLV LPFAVFARLD  DEQRRQCVL VFPPQEAFFW RASRLYTLVL GFAIPVSTIC VLYTTLCL HAMRLDSHAK  ALERAKKRV FLVAILAVC LLCWTPYHLS TVVALTTDLP QTPLVIAISY FITSLTYANS  CLNPLYAFL DASFRNLRLQ LITCRAAA</p>	Homo sapiens
279	3868	G Protein- Coupled Receptor GPR8	NP_005277.1	<p>atgcaggcgc ctgggcaccc agagccctt gagagcagg gctccttctc cctcccaag A  atgggtgccca acgtctctca ggacaaatggc actggccaca atgccacctt ctcgagacca  ctgcggttc tctatgtct cctgcgcgc gtgtactccg ggtactgtgc tgtggggtg  actggcaaca cggcgtgcat cctgttaatc ctaaggcgc ccaagatgaa gacggtgacc  aacgtgttca tctgaaact gccgtcgc gccgtgctt tcaagctggt actgcccgtc  aacatgcgcg agcacctgct gcagtactgg ccttcgggg agctgctctg caagctggtg  ctggccgtcg accactaca catcttctc agcatctact tctagccgt gatgagcgtg  gaccgatac tgggtgtgct ggccacgtg aggtccgc acatgccctg gcgcacctac  cggggggcga aggtcgccag cctgtgtgtc tggctggcg tcaaggtcct ggttctgcc  ttcttctct tgcgtgctg ctacagcaac gagctgcagg tcccaagctg tgggtgagc  ttcccggtgc ccgagcgggt ctggttcaag gccagccgtg tctacacttt ggtccctggc  ttcgtgtgc ccgtgtgcac catctgtgtg ctctacacag acctcctgc caggctcgg  gccgtggcg tccgtctggt agccaaggct ctaggcaagg ccaggcgga ggtgacctc  ctggtctctg tgcgtgtggt cgtgtgctc ctctgctga cgccttcca cctggcctc  gtcgtggccc tgaccacgga cctgccccag accccactgg tcatcagat gtcctacgtc  atcaccagc tcacgtacgc caactcgtg ctgaacctt tctctacgc cttctagat  gacaaacttc ggaagaactt ccgagcata ttgcggtgct ga</p>	Homo sapiens



280	3869	G Protein- Coupled Receptor HM74	NM_006018	cgccactttg ctggagcatt cactaggcga ggcgtccat cggactcact agccgcactc A atgaatcggc accatctgca ggatcacttt ctggaatatag acaagaagaa ctgctgtgtg sapiens ttccgagatg acttcattgc caagtggttg ccgccggtgt tggggctgga gtttatcttt ggccttcttg gcaatggcct tgccctgttg atttctgtt tccacctcaa gtccctgaaa tccagccgga ttttctctgt caactggca ttagctgact tctactgat catctgctg ccgttcgtga tggactacta tgtgcggcgt tcagactgga actttgggga catcccttg cggctggtgc tcttcattgt tgccatgaac cgccaggga gcatcatctt cctcacggtg gtggcggtag acaggtattt ccgggtggtc catccccc acccctgaa caagatctcc aatggacag cagccatcat ctctgctt ctgtgggca tcaactgttg cctaacagtc cacctcctga agaagaagt gctgatccag aatggccctg caaatgtgtg cateagcttc agcatctgcc ataccttcg gtggcacgaa gctatgttc ccttgaggtt cctcctgccc ctgggcata tctgttctg ctacggcaga attatctgga gctgcgga gagacaaatg gacggcatg ccaagatcaa gaggccatc accttcata tgggtgtggc catgtcttt gtcatctgct tcttcccg agatgtgtg cggatccgca tcttctggt cctgcaact tcgggcacgc agaattgtga agtgaccgc tcggtggacc tggcgttctt tateacttc agcttcacct acatgaacag catgctggac ccgtggtgt actacttctc cagccatcc tttcccaact tcttctccac ttgatcaac cgtgcctcc agaggagat gacaggtgag ccagataata accgcagcac gagctcgag ctacagggg accccaacaa aaccagaggc gtccagagg cgttaatggc caactccgtt gagccatgga gccctctta tctgggcca acctcaata accattccaa gaaggacat tgtcaccag aaccagcatc tctggagaaa cagttgggct gtgcatcga gtaatgtcac tggactcgc ctaaggtttc ctggaacttc cagattcaga gaatctgatt taggaaaact tggcagatg agtgggagac tggttgcaag gtgtgaccac aggaatcctg gaggaacaga gactaaagt tctaggcatc tgaacttgc ttcatctctg acgtcgcag gactgaagt gggcaaatg taggcgttc tctgagcag agttggagcc agagatctac ttgtgacttg ttggcctct tccacatct gctcagact gggggggct cagctcctg ggtgatattt agcctgctg tgagctctag caggataag gagagctgag attggaggga attgtgttc tctggaggga agcccaggca tcattaaaca agccagttag tcaactgctt tccgtggacc aattcatct tcagacaagc tttagagaaa tggaactagg gaagagactc acatgctttg gttagtatct gtgtttccg tgggtgtaat aggggattag cccagaaagg gactgagcta aacagtgtta ttatgggaaa gaaatggca ttgctgcttt caaccagcga ctaatgcaat ccattcctct cttgtttata gtaacttaag ggttgagcag ttaaaacggc ttcaggatag aaagctgttt cccacctgtt tegtttacc attaaaaagg aaacgtgct ctgccccacg ggtagagggg gtgcacgttc ctctgggtc cttcgctgtt gtttctgtac ttaccaaaaa tctaccactt caataaattt tgataggaga caaaaaaaa a	281	3869	G Protein- Coupled Receptor HM74	NP_006009.1	MNRHLLQDHF LEIDKKNCCV FRDDFIKVL PPVLGLEIF GLLGNGLALW IFPFHLKSWK P SSRIFFLELA VADELLIICL PFVMDYVVR SDWNFGDIPC RLVLFMFAMN RQSIIFLTV sapiens VAVDYFRVW HPHALNKIS NWTAAIISCL LWGITVGLTV HLLKKLLIQ NGPANVCISF SICHTFRWHE AMFLLEFLP LGIILFCSAR IISLORQM DRHAKIKRAI TFMVVAIVF VICFLSVW RIRIFWLLHT SGTQNCVYR SVDLAFITL SFTYMNMLD PVVYFSSPS FPNFFSTLIN RCLQKMTGE PDNNRSTVE LTGDPNKTRG APEALMANSG EPWSPSYLGP
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282	3870	G Protein- Coupled Receptor OGR1	NM_003485	TSNNHKKGH CHQEPASLEK QLGCCIE	atggggaaca tcaactgcaga caactcctcg atgagctgta ccacgacca taccatccac A	Homo sapiens
					cagacgtgg ccccggtggt cctatgtacc gtgctggtgg tgggcttccc ggccaactgc	
					ctgtccctct acttcggcta cctgcagatc aagcccgga acgagctggg cgtgtacctg	
					tgcaacctga cgggtggcga cctcttctac atctgtgagc tgccttttg cgtgcagtac	
					gtgtgcagc agacaactg gtctcacggc gacctgtctt gccaggtgtg cggcatcctc	
					ctgtacaga acatctacat cagcgtgggc ttctctgtct gcatctcgt ggacgcgtac	
					ctggctgtgg cccatccctt cggcttccac cagttccga cctgaaggc ggcgtcggc	
					gtcagcgtgg tcatctgggc caaggagctg ctgaccaga tctacttctt gatcacgag	
					gaggtcatc agacagagaa ccagcacccg gtgtgcttg agcactacc catccaggca	
					tggcagcgc ccatcaacta ctaccgttc ctggtgggt tctcttccc catctgcctg	
					ctgctggcgt cctaccaggg catcctgcgc gccgtgcgc ggagccacgg caccagaag	
					agccgaagg accagatcca gcggtggtg ctacgacccg tggatcatct cctggcctgc	
					ttcctgccc accacgtgtt gtgtggtg cgcagctctt gggagggcag ctgcgacttc	
					gccaaagggc ttttcaacg ctaccacttc tccctctgc tcaccagctt caactgcgtc	
					gccgacccg tgctctactg ctctgtcag gagaccacc accgggacct ggccgcctc	
					cgcgggctt gcctggcctt cctacactgc tccaggaccg gccggggcag ggaggcctac	
					ccgtgggtg ccccgaggc ctccgggaaa agcggggccc aggtgagga gcccgagctg	
					ttgaccaagc tccaccggc cttccagacc cctaaactgc cagggtcggg cgggttcccc	
					acgggacagt tggcctag	
283	3870	G Protein- Coupled Receptor OGR1	NP_003476.1	MGNITADNSS MSCTIDHTIH QTLAPVYVT VLVGFPANC LSLYFGYLQI KARNELGVYL P		Homo sapiens
				CNLTVDLIFY ICSLPFWLQY VIQHDNWSHG DLSCQVCGIL LYENIYISVG FLCISVDRY		
				LAVAHPRFPH QFRTLKAAVG VSVVIWAKEL LTSIYFLMHE EVIEDENQHR VCFEHPYIQA		
				WQRAINYYRF LVGFLFPICL LLASYQGILR AVRRSHGTQK SRKDIQRLV LSTVWIFLAC		
				FLPYHVLLLV RSVWEASCDF AKGVFNAYHF SLLTSTFNCV ADPVLYCFVS ETTHRDLARL		
				RGACIAFLTC SRTGRAREAY PLGAPEASGK SGAQGEPEL LTKLHPAFQT PNSPGSGGFP		
				TGRLA		
284	3921	Prostacyclin Receptor	NM_000960	agcaagtga ggcacagacg caccgggacag gagagcctgg gcaagactgg agagcccaga A		Homo sapiens
				cctgggatgg cggattcgtg caggaacctc acctacgtgc ggggctcgtt gggggccggcc		
				accagcacc tgatgttcgt ggcgggtgtg gtgggcaacg ggctggccctt gggcatcctg		
				agcgacggc gaccggcgc cccctcggc ttgcggtgc tggtaaccgg actggcgggc		
				accgacctgc tgggacacag ctctcctgag cggcgggtg tctgtgccta tggcgcaac		
				agctccctgc tgggctggc ccgagggcg cccgcccgtt gcgatgcctt cgccttcgcc		
				atgacctct tcggcctggc gtccatgctc atctctttg ccatggcgtt ggagcgtgc		
				ctggcgctga gccaccccta cctctacgc cagctggacg gccccgctg cgcgcgctg		
				ggcgtgccag ccatctacgc ctctcgtgc ctctctcgc cgtgccctt gctgggcctg		
				ggccaacacc agcagtactg ccccgccagc tgggtgcttc tccgcatgc ctggggcccag		
				ccggggcgcg ccgcctctc gctggcctac ggcggcctgg tggcctgct ggtggctgcc		
				atctctctt gcaacggctc ggtcacccctc agcctctgc gcatgtacc ccagcagaag		
				cgcacacagg gctctctggg tccacggcgc cgcacccggag aggacagggt ggaccacctg		

285	3921	Prostacyclin NP_000951.1 Receptor	atcctgtggt ccctcatgac agtgggtcatg gccgtgtgct ccctgcctct cactgcccgc tgcttccacc aggtgtgcgc cctgacagc agcagtgaag tgggggaccc ccttgccttc cgcttctacg ccttcaacc catctggac cctctgtgct tgcctgttct cgcgaaggct gtcttccagc gactcaagct ctgggtctgc tgcctgtgct tgggcccctc cactgtgct tcgacagac ccttttccca gctgcctcc cggagggagg acccaagggc cccctctgct cctgtgggaa aggaggggag ctgggtgctt ttgtcgctt gggcgagg gtaggtggag cccttgcttc ccacacagca gtcagcgc agcgcctgg gaaagtcgtc caaagcagaa gccagcgtcg cctgtccct ctgtgacat ttcaagtga cctgtgac tctgcccgtg cttcgggcga caggagccag aaatcaggg acatggctga tggctgcga tctggaacc ttggccccc aactctggg ccatcagct gctgttctc ctgctggcagg gtagtgcgtg ctggctctgg gaagagagt agggacagag gaaacgttta tctggagtg cagaagaat ggttctctca aaataaccag tggcctggcc gactgtctt agcttctgt tccccatcca tctcattgtc taaatattta gaaggcgag agttccca agcttctgt acgtcagg ctgctctggt ctgggtgctg gctccaatct agtccactt agggagcca actgcccacc ccaaagtcct aggggatgg cctcccctc taccagcca ctccaagagc cagcccctt tctgtccac aaaaaccaca gttattggaa agctccctg ccttccctg ccgtgtgctc cccaccagg ttgggagccc tggcatccca agggggaac gggaggaagg gtaggtgct gcattgtggg tgatgacga gacatgtgc ttggtacaaa aagggcctga gacattccac ct	Homo sapiens
286	3923	Prostaglandin D2 Receptor	LLGTSFLSPA VFVAYARNSS LLGLARGGPA LCDAFAMT FFLASMLIL FMAVERCLA LSHPYLYAQL DGPRCARIAL PAIYAFVLF CALPLLGLGQ HQQYCPGSGW FLRMWAQPG GAFLSLAYAG LVALLVAAIF LCVSVTLTL CRMYRQKRR QGSLGPRPT GEDEVHLIL LALMTVMVAV CSLPLTIRCF TQAVAPDSSS EMGDLLAFRF YAFNPILDPW VFILFRKAVF QRLKLWVCL CLGPAHGDSQ TPLSQLASGR RDRAPASPV KEGSCVPLS AWGEGQVEPL PPTQSSGSA VGTSSKAEAS VACSLC gctgtgcaac ctggcgcca tgcgcaacct ctatgcgat caccggcggc tgcagcggca A cccgcgtcc tgcaccagg actgtgccga gccgcgcgc gacgggaggg aagcgtccc tcagcccctg gaggagctgg atcactcct gctgctggc gtagtagacc tgccttcac tatgtgttct ctgcccgtaa tttatcgcc ttactatga gatttaagg atgtcaagg gaaaaacagg acctctgaag aagcagaaga cctccgagcc ttgcgattc tatctgtgat ttcaatttg gacccttgg tttttatcat ttccagatct ccagtattc ggataattt tcacaagatt ttcatagac ctcttaggta caggagccgg tgcagcaatt ccactaacat ggaatccagt ctgtgacagt gtttttcaat ctgtggttaag ctgaggaata tgtcacatt tcagtcaaaag aacca MKSPFYRCQN TTSVEKGNLS VMGGVLFSTG LLGNLLALGL LARSGLWCS RRRLPLPSV P FMYLVCLTV TDLLGKCLS FVLAAYAQN RSLRVLAPAL DNSLQAF FMSFFGLSST LQLLMALETC WLSLGHFFY RRLHILRLGA LVAPVSAF LAFALPFMG FGKFOYCPG TWCFIQWHE EGSLSVLGYS LDYSSIMALL VLATVLCNLG AMRNLAMHR RLQRHPRCT RDCAEPRADG REASQPLEE LDHLLLLALM TVLFTMCSLP VIYRAYGAF KDVKEKNTS EEAEDLRLR FLSVISIVDP WIFIFRSPV FRIFHKIFI RPLRYRSCS NSTNMESSL	Homo sapiens
287	3923	Prostaglandin D2 Receptor		Homo sapiens

288	3924	Prostaglandin E Receptor EP1	NM_000955	<p> gggggaggga gggctgagc gccggtgatg gggacccac atcccaggca gtgcccggcac  ccctggcgc tgacatgagc ccttgccggc cctcaacct gagcctggcg ggcgaggcga  ccacatgagc ggcgccttg gtccccaaca cgtcgccgt ggcgcgtcg ggcgttcgc  ccgctgccc catcttctc atgacgttg gcccgctgc caacctgtg ggcgtggcg  tgctggcga ggcgcggc cgcctggag cgcgcgtc gcccaccac ttctgtgtg  tcgtggccag cctgctggc accgacctg cgggcccgt gatccgggc ggcgtggtg  tgctgtgta cactggggg cgcgtcccg cgcgggggc ctgccactc ctggcggtg  gcatggtctt cttcgccctg tgcgcctgc tgcgtggctg tggcatggc gtggagcgt  gcgtggcgt cacgcggcg cgtctccac cgcgcgggt ctcgctgc cgcgcggcg  tggcctggc cgcgtggc ggcgtggc tggcctggc gctgctgc ctcggcgcg  tgggcgcga tgagctgag taccgggca cgtggtgtt catcgccgt ggtcccccgg  gcgtctggc ccaggcact cttgctggc tcttggcag cctcgccgt gtcgctcc  tgcccgct ggtgtgaac agctcagc gctggccct gcatcgcc cgtggcgac  gccgctccc aggcctccc cgcgctcag gcccgcag cgcgctgc tggggggcg  acggacccc ctcggcctc gctcgtccg cctcgtccat cgttcggc tccacctct  ttggcgctc tcggagcgc gctcggcag cagagctcg cgcacagc gtggagatg  tgggccagct tgcggtatc atggtggtg cgtgcatcg ctggagccc atgctggtg  tggtggcgt gccctggc gctggagct ctacctcct gcagcgcca ctgttctgg  ccgtgcct tgcctcctg aaccagatc tggaccttg ggtgtacat ctactgcgc  agccgtgct gcgcaact cttgcctct tgcgcgcag ggcggagc aagggcgcc  ccgcgggct ggcctaaac cgcagcctc cgcgctgc cgtcgtgc agtcccgcc  acagcgct cagccactc taagcaca cagagccca acgactaag cagccaccc  tggtctggc ccaggtgcg ggcgagc ctttggatc aaaaagcct tctgcg  </p>	Homo sapiens
289	3924	Prostaglandin E Receptor EP1	NP_000946.1	<p> MSPCGPLNS LAGEATCAA PWVNTSAVP PSGAPALPI FSMTLGAVSN LLALLAQA P  AGRLRRRSA TTFLLFVASL LATDLAHHVI PGALVRLYT AGRAPAGGAC HFLGCMVFF  GLCPILLGCG MAVERCVGT RPLHAARVS VARARLALAA VAAVALAVAL LPLARVGRYE  LQYPGTWCFI GLGPPGGWRQ ALLAGLFASL GLVALLAALV CNTLSGLALH RARWRRRSR  PPASGPDNR RRGAGHPRS ASASSASSIA SASTFFGSR SSGSARRARA HDVEMVGQLV  GIMVSCICW SPMLVLVALA VGGWSSTSLQ RPLFLAVRLA SWNQILDWV YLLRQAVLR  QLLRLLPPRA GAKGGPAGLG LTPSAWEASS LRSSRHSGLS HF  </p>	Homo sapiens
290	3925	Prostaglandin E Receptor EP2	NM_000956	<p> gggcgcctg cgcgcgctg ggtgcggga gggggtctg gatttcggtc cctcccctt A  ttctctgag tctcggaac ctcagctct cagacctct tctcccagg taaaggccgg  gagaggagg ccatctctt ttccaggcacc cccacatgg gcaatgctc caatgactcc  cagctgagg actgcagac gcgacagtgg cttccccag gcgaaagccc agccatcagc  tccgtcatg tctcgcccg ggtgctggg aacctcatg cactggcgt gctggcgcg  cgtggcggg gggacgtgg gtgcagccc ggcgcagga cttccctct cttgttccac  gtgtggtga cgcagctgg gtccaccgac ctcgtggga cctgcctcat cagccagtg  gtactggctt cgtacgcgc gaaccagacc ctggtggcac tggcgcccga gagccgcgc  tgccactact tcgcttccg catgacctc ttccagctgg ccacgatgct catgctctc  gccatggccc tggagcgcta cctctgac ccttcacct ggttcacca ggcgcgcgc  tcggcctccg gggcctggc cgtgctgct gtcactatg cagtctccct gctctctgc </p>	Homo sapiens

291	3925	Prostaglandin E Receptor EP2	NP_000947.1	<p> tgcgtgcgc tgctggacta tgggcagtag gtccagtagt gccccgggac ctggtgcttc  atccggcac ggcggaccgc ttacctgcag ctgtacgcca cctgctgct gcttctcatt  gtctcgggtgc tgcctgcaa cttcagtgct attctcaacc tcatccgcat gcaccgcga  agccggagaa gccgctgcg accctccctg ggcagtgccc gggggggccc cggggccgc  aggagagggg aaagggtgtc catggcgag gagcggacc acctcattct cctggctatc  atgaccatca ccttcgcgt ctgctccttg cctttcaga ttttgcata tatgaatgaa  acctctccc gaaaggaaa atgggacctt caagctctta ggtttttatc aattaattca  ataattgacc cttgggtctt tggcatcctt aggcctcctg ttctgagact aatgcgttca  gtcctctgtt gtcggatttc attaagaaca caagatgcaa cacaaacttc ctgttctaca  cagtcagatg ccagtaaaaca gctgacctt tgaggtcagt agtttaaaag ttcttagtta  tatagcatct ggaagatcat ttgtgaaattg ttccctggag aaatgaaaac agtgtgtaaa  caaatgaag ctgccctaata aaaaaggagt atacaacat ttaagctgtg gtcaaggcta  cagatgtgct gacaaggcac ttcatgtaaa gtgtcagag gagctacaaa acctaccctc  aatgagcatg gtacttgccc ttggaggaa caatcggtg cattgaagat ccagctgcct  attgatttaa gctttcctgt tgaatgacaa agtatgtgt ttgttaattt gttgaaacc  ccaaacagtg actgtacttt ctattttaat ctgtctacta ccgttataca catatagtgt  acagccagac cagattaaac ttcatatgta atctctaga agtcaaatg tggaggaac  caagcctgct gtcttgtag cacttagcga accctttatt tgaacaaatga agttgaaaaat  cataggcacc ttttactgtg atgtttgtgt atgtggagt actctcatca ctacagtatt  actcttaca gactggactc agtgggttaa catcagtttt gtttactcat cctccaggaa  ctgcaggtca agtgtcagg ttattttatt tataatgtcc atagtctaat agtgatcaag  agacatttag gaatggttct ctcaacaaga aataaatgaa atgtctcaag gcagtttaatt  cctattaata ctcttattat cctatttctg ggggaggatg tacgtggcca tgtatgaagc  caaatattag gcttaaaaac tgaaaaatct ggttcattct tcagatatatc tggaaacctt  ttaaagtga tattggggcc atgagtaaaa tagattttat aagatgactg tgtgtacca  aaattcatct gtctatatct tatttagggg aacatgggtt gactcatctt atatgggaaa  ccatgtagca gtgagtcata tcttaataata ttcttaaatg tttggcatgt aaatgtaaac  tcagcatcaa aatatttcag tgaatttgca ctgtttaatc atagtactg tgtaaactca  tctgaaatgt tacaataa aactataaaa ca </p>	Homo sapiens
292	3926	Prostaglandin E Receptor EP2	L32662	<p> tctgaaatgt tacaataa aactataaaa ca  RSSLFLFVH VTELVTDL DEDCETROWLP PGESPAISSV MFSAGVLGNL IALALLARRW RGDVGCSSAGR P  LATMLMFAM ALERYLSIGH PYFYQRRVSA SGGLAVLPVI YAVSLLFCSL PLDDYQYVQ  YCPGTWCFIR HGRTAYLQLY ATLLLLIIVS VLACNFSVIL NLIRMHRRSR RSRGSPSLGS  GRGGPGARRR GERVSMEEET DHLILLAIMT ITFAVCSLPF TIFAYMNETS SRKEKWDLOA  LRFSLINSII DPWFVAILRP PVLRLMRSLV CCRISLRQD ATQTSCTQS DASKQADL A  atgagaaaaa gaagactcag agagcaagag gaattttggg gaaattaa </p>	Homo sapiens
293	3926	Receptor EP3	NM_000957	<p> accagaggtt tcccagagag gaaggcgtg ctcctctccc ggcagtagg ccttggcgcc A  gccggggccg cggctccagc agcggagtag ggcggcggt cgcggcgca ccatgggggg  cagcccgacc ccagccgagg taaacgccga cctccgcgc gcggcgcc gcgtctgccc </p>	Homo sapiens

294	3926	Prostaglandin E2 Receptor EP3	NP_000948.1	<p> cctcccgtg cggctctctg gacgccatcc cctcctcacc tcgaaagccaa catgaaggag  acccggggt acggaggga tgcaccttc tgcacctgc tcaacctc ctacacagc  atgtgggcg ccgagcgttc ccgagggcc ccggggcaacc tcaacgccc tccagggtct  ggcaggatt gcgatcggt gtcgctggc ttcccgatca ccatgctgct cactggttc  gtgggcaacg cactggccat gtcgctgctg tgcgcagct accggcgccg ggagagcaag  cgcaagaagt ccttctgct gtgcacggc tggctggcg tcaacgacct ggtcggcag  cttctacca cccgggtcgt catcgtcgtg tacctgtcca agcagcgttg ggagcacatc  gaccgtcgg ggcggtcctg cactttttc gggtgacca tgaactgttt cgggctctcc  tcgttgttca tggccagcg catggcgctc gacggggcg tggccatcag ggcccgccac  tggatgcga gccacatgaa gacgcgtgac acccgctg tgcgtcctg cgtgtgctg  gccgtgctcg ccttcgacct gctgcggtg ctggcggtg gccagtacac cgtccagtgg  ccgggacgt ggtgcttcat cagcacggg cgaggggga acgggactag ctcttcgcat  aactgggga accttttct cgcctcgtc ttgctctcc tgggctctt ggcgtgaca  gtcaccttt cctgcaacct ggcacattt aagccctg tgcctcgtg ccgggccaa  gccacggcat ctacgtccag tggccagtgg ggcgcatac gcacggagac gccattcag  cttatggga tcatgtcgt gctgtcgtc cactggttc cgtcctgat aatgatgtg  aaaatgatc tcaatcagac atcagttgag cactgcaaga cacacacgga gaagcagaaa  gaatgcaact tcttctaat agctgtcgc ctggtctac tgaaccagat ctggatcct  tgggtttacc tgcgtgtaag aaagatcct ctccgaaagt ttgcccagat gagaaaaa  agactcagag agcaagagat gggcgctgat ggaaggtgtt ttgtcctg atggaggcag  gtccccagga cttggtgcag ttctcctgat agagacccct cagtgctcca gctaaagctga  tgacttgaag ataaatctgc ctaacctgg gatgaagat ctgtgaacta ttttgacagc  agataggaa ttttgggaa attaaacct gccttctgc caggatcaca tcaactggaag  ctccatgact ctcttttgt aaaaagaaa aaaaacacag aaaaacccac ctccaaact  attctcttt actctctcc ccaagccac ccccaaat aactgttat cagaagctgt  tatgtcctgt ttccatacat gttttgtac ttttactata tctacataca tcaattaaac  ttatgtccta ttgttttgt aatttatatt tgcgtataca ttatcatatg taaaattg  attttttat tgaataattat gttctgtg attatccac attgaaacat ggagctctaa  atcgtttaatt ttaaccgcta tagagtattc cataatttga ataaagcata attgtttgt  ac </p>	Homo sapiens
295	3927	Prostaglandin E Receptor EP4	NM_000958	<p> gctgggactc gctcttgaag gaaaaaaat cagcagtaag aatccagca ccatcttca  ctgacccatc ccgctgcac tctgtttcc caagtgttg aaagtgga cacttgact  cgggtgtcca aatcgacag cactgagac cggctttgag aagccgaaga ttggcagtt </p>	Homo sapiens

296	Prostaglandin E Receptor EP4	NP_000949.1	<p>tccagactga gcaggacaag gtgaaagcag gttggaggcg ggtccaggac atctgagggc</p> <p>tgacctggg ggctcgtgag gctgccaccg ctgctgcgcg tacagaccca gcttgcaact</p> <p>ccaaggctgc gcaccgccag ccactatcat gtccactccc ggggtcaatt cgtccgcctc</p> <p>cttgagcccc gaccggctga acagccaggt gacctcccg gcggtgatgt tcatcttcgg</p> <p>ggtggtgggc aacctggtg ccactggtgt gctgtgcaag tcgcgcaagg agcagaagga</p> <p>gacgaccttc tacacgctgg tatgtgggct ggctgtacc gacctgttgg gaccttggtt</p> <p>ggtgagcccc gtgaccatcg ccacgtacat gaaggccaa tggccccggg gccagccgct</p> <p>gtgcgagtac agcaccttca ttctgtctt cttagcctg tccggcctca gcateatctg</p> <p>cgccatgagt gtcgagcgct acctggccat caacctgcg tatcttaca gccactacgt</p> <p>ggacaagcga ttggcgggcc tcacgtcttt tgcagtctat gcgtccaaag tgcctttttg</p> <p>cgcgtgccc aacatgggtc tcggtagctc gcggtgcag taccagaca cctggtgctt</p> <p>catcgactgg accaccaacg tgacggcgca cgccgctac tctacatgt acgcgggctt</p> <p>cagctccttc ctcatctcgc ccacgtctt ctgcaacgtg cttgtgtgcg gcgcgtgct</p> <p>ccgcagtcac cgccagtcca tgcgcgcac ctgcgtggc accagcagc accacgcggc</p> <p>cgcggccgc tgggttgctt ccggggcca cccgctgccc tcccagcct tgcgcgctt</p> <p>cagcgacttt cggcgccgc cagcttccg ccgcctgcg gcgcgcgaga tccagatggt</p> <p>catcttactc atggcacct cctggtggtt gctcatctgc tccatccgc tctggtgctg</p> <p>agtattcgtc aaccagttat atcagccaa gttggagcga gaagtcaagta aaaaaccaga</p> <p>tttgcaggcc atccgaattg cttctgtgaa ccccatccta gacccctgga tatatactt</p> <p>cctgagaaag acagtgtcca gtaagcaat agagaagatc aaatgcctct tctgcccgat</p> <p>tggcgggtcc cgcaggagc gctcggaca gcaactgcca gacagtcaaa ggacatcttc</p> <p>tgccatgtca ggcactctc gctccttcat ccccgagg agtgaggaga tcagcagtac</p> <p>atctcagacc ctctgcccag acctctcat ggcagacctc agtgaaaaatg gcttgaggag</p> <p>caggaatttg ctccagggt tgcctggcat gggcctggcc caggaaagaca ccacctcact</p> <p>gaggactttg cgaatatcag agacctcaga ctcttcacag ggtcaggact cagagagtgt</p> <p>cttactggtg gatgagctg gtgggagcgg cagggtggg cctgccccta aggggagctc</p> <p>cctgcaagtc acatttccc gtgaaacact gaacttatca gaaaaatgta tataataggc</p> <p>aaggaaaaga atacagtact gttcttgac cttataaaa tctgtgtcaa tagacacata</p> <p>catgtcacat ttagctgtgc tcagaaggcg tatcatca</p>	Homo sapiens
297	Prostaglandin F2-alpha Receptor	NM_000959	<p>LAVTDLLGTL LVSPVTIATY MKGQWPGGQF LCEYSTFILL FFSLSGLSII CAMSVERILA</p> <p>INHAYFYSHY VDKRLAGLTL FAVYASNVLF CALPNMGLGS SRLQYPDTCW FIDWTINVT</p> <p>HAAYSVMYAG FSSFLILATV LCNVLVCGAL LRMHRQFMRR TSLGTEQHHA AAAASVASRG</p> <p>HPAASPALPR LSDFRRRRSF RRIAGAEIQM VILLIATSLV VLICSIPLV RVFVNQLYQP</p> <p>SLEREVSKNP DLQAIRIASV NPILDPWIYI LLRKTVLAKA IEKIKLFCR IGSSRRERSG</p> <p>QHCSDSQRTS SAMSGHSRSF ISRELKEISS TSQTLPLDLS LPDLSENGLG GRNLLPGVPG</p> <p>MGLAQEDTTS LRTLRISETS DSSQGDSES VLLVDEAGGS GRAGPAPKGS SLQVTFPSET</p> <p>LNLSEKCI</p>	Homo sapiens
298	Prostaglandin F2-alpha Receptor	NM_000959	<p>ggcgcggggc gccatggcac accagcggcg tccgtcttct gctccctcaga gagcccggt A</p> <p>ggcgcctgg gatgacaaga tgtctggact gcaatcctgc acagttttga gagggagatg</p> <p>acttgagtggt ttggctttta tctccacaac aatgtcccatg aacaattcca aacagctagt</p>	Homo sapiens

gtctcctgca gctgcgcttc ttcaaacac aacctgccag acggaatacc ggctttccgt  
atctttttca gtaatcttca tgacagtggg aatcttgtca aacagccttg ccatcgccat  
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cttagccctt ggtgtttcat tgttgtgcaa tgcaatcaca ggaattacac tttaagagt  
taaatttaaa agtcagcagc acagacaagg cagatctcat cattggaaa tggtaatcca  
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gcaatcctat ctagaatggg ccatttcttg tcacatttga caaataggac tgcctacatt  
tattattatg aggtcgatt gttgttgga gtttttttct atgtcataga tttagcaattt  
tcaataaatt attttttctc tgaataattt gtgtgtgatt gcacaataaa taatttttag  
agaaacaaag gctctttctc agcacattga tgggcaacta gaattacagc agtttcaaac  
tctacctagg ataatgcaa caaacccaag ctacatgcca atgatagggt caaagaatat  
tggcaaaagg tgccttacct tgagccatta tttgtgtcag agaacaagg aacagaatc  
aatataaaa ttcaaaagact atctgcagct agtgtgttc ttctttacac acatatacac  
acagacatca gaaaattctg ttgagagcag gttcattaaa tttgtaagat ggcatttct  
aaagcctgtg ctaccagtac taagagggga agactggcaa ttgccaagc acttggggat  
tattataca attaactagg agatcaag atactaat ctcccaaat ttccaataa  
taattgagac tttttcttgg ctgtgttgg taattcaacc aaaagaattt caatacccat  
tcaaatgtgc ctaggctat cagaaattag ggaagtagt cctgctttat aataggaaaa  
tgtatttctg tataagattt cttgtcttc ataaaaatg ggattcattt aaaaattaat  
cttccctgt taggtgatt tcagattctc taggaaatct ggtgaagtaa ccagaagact



298	3928	Prostaglandin F2-alpha Receptor	NP_000950.1	MSMNNSKQLV SPAAALLSNT TCQTENRLSV FFSVIFMTVG ILSNSLAIAI LMKAYQRFRRQ P	Homo sapiens
				KSKASFLLLA SGLVITDFFG HLINGAIAVF VYASDKIEWIR FDQSNVLCSE FGICMVESGL	
				CPLLGSVMA IERCIGVTKP IFHSTKITSK HVKMMLSGVC LFAVFIALLP ILGHRDYKIQ	
				ASRTWCFYNT EDIKDWEDRE YLLLFSLGL LALGVSLICN AITGITLLRV KFKSQHRQG	
				RSHLEMIQ LLAIMCVSCI CWSPLVTMA NIGINGNHSI ETCETTLFAL RMAFWNQILD	
				PWYILLRKA VLKNLYKLAS QCCGVHVISL HIWELSSIKN SLKVAAISES PVAEKASST	
299	4051	Proteinase-Activated Receptor 2	NM_005242	gcgcccgcgc tggggagcgc gcgagcagag gctccgattc ggggcaggtg agaggtgac A	Homo sapiens
				ttctctcgcg tgcgtccagt ggagctctga gtttcgaatc ggtggcgccg gattccccgc	
				gcgcccgcgc tgcgggcttc caggaggtg gcgagcccca gcgcgccgtg gctgctgggg	
				gcgcccgcgc tgcgtagcgc ctctctctcc tgcagtgcca ccatccaagg aaccaataga	
				tcctctaaag gaagaagcct tattggtaag gttgatggca catcccacgt cactggaaaa	
				ggagttacag ttgaacacgt cttttctgtg gatgagtttt ctgcatctgt cctcactgga	
				aaactgacca cggctctcct tccaatgtc tacacaattg tgtttgtggt ggttttgcca	
				agtaacggca tggccctgtg ggtctttctt tccgaaacta agaagaagca cctgctgtg	
				attacatgg ccaatctggc cttggctgac ctctctctg tcatctggtt ccccttgaag	
				attgcctatc acatacatg caacaactgg atttatggg aagctctttg taatgtgctt	
				attggctttt tctatggcaa catgtactgt tccattctct tcatgacctg cctcagttg	
				cagaggtatt gggtcacgt gaaccccatg gggcactcca ggaagaaggc aaacattgcc	
				attggcatct ccttgccaat atggctgctg attctgctgg tcaccatccc ttgtgatgtc	
				gtgaagcaga ccatcttcat tctgcccctg aacatcacga cctgtcatga tgttttgcc	
				gagcagctct tggtaggaga catgttcaat tacttctct ctctggccat tggggtcttt	
				ctgttccag ccttctcac agcctctgcc tatgtgtga tgaatcagaat gctgcgatct	
				tctgcatgg atgaaaactc agagaagaaa aggaagaggg ccatcaaat cattgtcact	
				gtcctggcca tgtacctgat ctgcttcat cctagtaacc ttctgctgt ggtgcattat	
				ttcttgatta agagccagg ccagagccat gtctatgcc tgtacattgt agcctctgc	
				ctctctaccc ttaacagctg catcgacccc ttgtctatt actttgtttc acatgatttc	
				agggatcatg caaagaacgc tctcctttgc cgaagtgtcc gcaatgtaaa gcagatgcaa	
				gtatccctca cctcaaaaga acactccagg aaatccagct cttactcttc aagttcaacc	
				actgttaaga cctcttattg agttttccag gtcctcagat gggaattgca cagtaggatg	
				tggaaacctgt ttaatgttat gaggacgtgt ctgttatttc ctaatcaaaa aggtctcacc	
				acataccacc g	
300	4051	Proteinase-Activated Receptor	NP_005233.2	MRSPSAWLL GAAILLAASL SCSGTIQGN RSSKGRSLIG KVDGTSHTVG KGVTVEVFS P	Homo sapiens
				VDEFSASVLT GKLTTFVLP I VYIVFVGL PSNGMALWVF LFRTKKKHPA VIYMANLALA	

301	4052	Proteinase- Activated Receptor 3	Receptor 2	<p>DLLSVIVFPL KIAYHIHANN WIYGEALCNV LIGFFYGNMY CSILFMTCLS VQRYWVIVNP  MGHSRKKANI AIGISLAIWL LILIVTIPLY VVKQIFIPA LRNITTCNDVL PEQLIVGDMF  NYFLSLAIGV FLPPAFLTAS AYVLMIRMLR SLAMDENSK KKRAIKLIV TVLAMYLICF  TPSNLLLVVH YFLIKSQQS HVYALYIVAL CSTDINSCID PFVYFVSHD FRDHAKNALL  CRSVRTVKQM QVSLTSKHS RKSSSYSSSS TTVKTSY</p> <p>cctgcctgca cggcacagga gagcaaaact ctacagacag accaaggctt ccatttgctg A  ctgacacatg gaactgaggt gaaattgtgc tccatgattt tacagatttc ataacgttta  agagacgga ctcaggtcat caaatgaaa gccctcatct ttgcagctgc tggcctcctg  ctctgttg ccaatttttg tcagagtggc atggaataat atacaacaa cttggcaaa  ccaaccttac ccattaagac ctttgtgga gtcctcccaa attctttga agagtcccc  ttttctgctt tggaaaggctg gacaggagcc acgattactg taaaaataa gtgcctgaa  gaaagtgctt cacatctcca tgtgaaaaat gctaccatgg ggtacctgac cagctcctta  agtactaac tgatacctgc catctacctc ctgggtgttg tagttggtg cccggccaat  gctgtgacc ttgtgatgct tttcttcagg accagatcca tctgtaccac tgtattctac  accaacctgg ccattgcaga tttcttttt tgtgttacct tgcctttta gatagcttat  catctcaatg ggaacaaact ggtatttggga gaggtcctgt gccgggccac cacagtcatc  ttctatggca acatgtactg ctcatctctg ctcttgctt gcacagcat caacgctac  ctggccatcg tccatctctt cactacccgg gccctgccc agcacacct tgccttggtta  acatgtggac tgggtgtggc aacagtcttc ttatatatgc tgccatttt cactactgaag  caggaatatt atctgttca gccagacatc accactgccc atgatgttca caacactgc  gagtcctcat ctcccttcca actctattac ttcactcctt tggcattctt tggattctta  attccatttg tgccttatcat ctactgctat cagcccatca tccggacact taatgcatac  gatcatagat ggtgtgtgga tgttaaggcg agctcctcca tcttgctgat tttaccatt  tgctttgctc caagcaatat tattcttatt attcaccatg ctactacta ctacaacaa  actgatggct tatattttat atatctcata gctttgtgccc tgggtagtct taatagtgc  ttagatccat tcttttatt tctcatgtca aaacccagaa atcacctcac tgcttacctt  acaaaatagt gaaatgatct tagagaacaa ggacagccat cacagagaac gtctgttttc  aagaacacaa taagcatagt gcaaggagct ccatttccga gctcctaaga aatatgcttc  aaaggtcaaa cattacaaa gcatagtag tttgtttgtt tgtttttgag actgagctc  actttatcac ccagactggc gtgagtgcc actatctgg cccagctact aaaaactt  ccaggtcagc ctcccaagta gctgggatta caccaccatg cttgctctga actcctgacc  gtatttttag tagagacggg gtttcaccat gttgaccagg ctgggtctga actcctgacc  tcaagtgat tccggcctc agctcccaa agtgctggat tacaggcgtg agccactgag  ccagccagca ttagtaattt ttaaaaacac ttatcagta ttttaaaaat gttaatgcag  gagaaaagat atcacaaact tatggaaaat gacatttcca tttgccttat tgctacttca  agctctttaa atccactct tccctatttc</p>	Homo sapiens
302	4052	Proteinase- Activated Receptor 3	NP_004092.1	<p>MKALIFAAAG LLLLPTFCQ SGMDNTNLL AKPTLPKTF RGAPPNSFEE FPFSALEGWT P  GATITVKIC PEESASHLV KNATNGYLTLS SLSTKLIPAI YLLVFVUGVP ANAVTLWMLF  FRTSICITV FYTNLAADF LFCVTLPFKI AYHLNGNNWV FGEVLCRATT VIFYGNMYCS  ILLACISIN RYLAIVHPFT YRGLPKHTYA LVTCGLVWAT VFYMLPFFI LKQEYILVQP  DITTCNDVHN TCSSSPFQL YYFISLAFGG FLIPFVLIY CYAAIIRTLN AYDHRWLWVY</p>	Homo sapiens

303	4090	G Protein-Coupled Receptor GPR17	NM_005291	KASLLILVIF TICFAPSNI I LIIHANYYY NNTDGLYFIY LIALCLGSLN SCLDPFLYFL MSKTRNHSTA YLTK	Homo sapiens
				ccgacaccca cgggaggaga tcaactgctg cccgcagac ccctgtccct tctcccgga A	
				ccagcagcta aggatgttc aaacggagtt ggtgggctgg atccagaag ccccaagag	
				agatgctgaa gactctcagg tctgactcca gccaaagcat gaatggcctt gaagtggctc	
				ccccaggtct gatcaccaac ttctccctgg ccacggcaga gcaatgtggc caggagacgc	
				cactggagaa catgctgttc gctctcttct accttctgga ttttatcctg gctttagt	
				gcaataacct ggctctgtgg cttttcatcc gagaccacaa gtccgggacc cgggccaacg	
				tgttccctgat gcatctggcc gtggcgagct tgtcgtgcgt gctggtcctg cccaccgccc	
				tggtctacca cttctctggg aaccactggc catttggga aatcgcatgc cgtctcacg	
				gcttccctct ctacctcaac atgtacggcca gcatctactt cctcacctgc atcagcgccg	
				accgtttcct ggccattgtg caccgggtca agtccctcaa gctccgcagg cccctctacg	
				cacacctggc ctgtgcccctc ctgtgggtgg tgggtgctgt ggccatggcc cggctgctgg	
				tgagcccaca gaccgtgcag accaaccaca cgggtggtctg cctgcagctg taccgggaga	
				aggcctccca ccatgcccctg gtgtccctgg cagtggcctt cacttcccc ttcatacca	
				cggtaacctg ctacctgctg atcatccgca gccctgcgga gggcctgcgt gtggagaagc	
				gcctcaagac caaggcagtg cgcattgatc ccatagtgtt ggcacatctt ctggctctgt	
				tcgtgcccta ccacgtcaac cgtccgtctt acgtgctgca ctaccgcagc catggggcct	
				cctgggcccac ccagcgcac ctggccctgg caaacggcat caoctcctgc ctccacagcc	
				tgtgcaactt gctctgtggc aaaaggtca agggcccgc cccacgcttc gaagggaata	
				ccaacgagag ctgctgagt gccaagtca agggcccgc cccacgcttc gaagggaata	
				agcgagagct gtttaggact cagcagaccc agctgtgagc gggggggcgc gtccaggccg	
				ctccccagc aagcaacctg aaatctcagc agatgccac cattctcta gatcgccctag	
				ttcacaacca taaaaaggaa gaactgaca aggggatcca tgggccaccc ctctgcaggg	
				gcttgtgatg gctacaatgg ctccctagaca ctcaacgact tcatctgtgg caggagagaga	
				ggaggccgga agaacaaccc ctgaacaatg gaggccttc ttcccgcta ggcctccagc	
				ctccttccc ctacagaatc gctcatcggc gaggcctcagc agaaagaccc tgaaggcagg	
				ctgcaaatga cccagaagag ggacctggga gtccctgtgg ggaaggggag ggagtctcaa	
				tactcctttg cagcgcaagg tactctgagt cccctctgta gtgcctctgc cagacacaca	
				ctgcctgagt tgaagagaca caggccacac atttcaggct ggttgcagc ggacgtcagc	
				actcacggcc tgggggact cagcacagct ctggattctg gatctctct gctgtaaccc	
				cacgcacaag cctgcaaccc ccagagctct ttgacaggct cccaggcctc ccagtcctgg	
				acaagcatgt gcagtcacgg gagctcagct caggccaggg ctgggctgtg cactgccc	
				ccactgaccc agaccactt cctccagaga ggcctctctc cgcctgagct atttccctg	
				ctagtgtgca gatatttccc taacatgtcc ttttttgtat tctgttgtac ggaccataaa	
				tataactgta gcttaagac taaaaaaaaa	
				MSKRSWAGS RKPPEMLKL SGSDSSQSMN GLEVAPPGLI TNFSLATAEQ CGQETPLEM P	
				LFASFYLLDF ILALVNTLA LWFIRDHKS GTPANVFLMH LAVADLSCVL VLPTRLVYHF	
				SGNHWPFGFI ACRLTGFLFY LNMYSIYFL TCISADRFLA IVHPVKSILK RRPLYAHLAC	
				AFLWVVAVA MAPLLVSPQT VQTNHTVVCL QLYREKASHH ALVSLAVAF FPFITVTTCY	
304	4090	G Protein-Coupled Receptor GPR17	NP_005282.1		Homo sapiens

305 4254 Rhodopsin NM\_000539  
LLIIRSLRQG LRVEKRLKTK AVRMIQVLA IFLVCFVPYH VNRSVYVLHY RSHGASCATQ  
RILALANRIT SCLTSLNGAL DPIMYFEVAE KFRHALCNLL CGKRLKGPPP SFEGKTNES  
LSAKSEL  
agagtcatec agctggagcc ctgagtggct gagctcaggc ctctgcagca ttcttgggtg A  
ggagcagcca cgggtcagcc acaagggcca cagccatgaa tggcacagaa ggcctaaact  
tctacgtgcc ctcttccaat cgcacgggtg tggtagcgag ccccttcgag taccacagct  
actacctggc tgagccatgg cagttctcca tgcctcacg tctacgtcac cgtccagcac aagaagctgc  
tgctgggctt ccccatcaac ttcctcacg ctgctcaacc tagccgtggc tgacctcttc atggtcctag  
gcacgctctt caactacatc cagcacccctc tacacctctc tgcattgata ctctgtcttc gggcccacag  
gtggcttcac cagcacccctc tttggccacc tggggcggtg tgtgtaagcc catgagcaac ttccgcttcg  
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gggagaacca tgcctcatg ggcgttgctt tccctgggtg tgcctgggtg gctggtgctg  
caccctcact cgcgggtg tccaggtaca tccctgggtg tgcctgggtg cctggtgctg  
tcgactacta cagctcaag cggaggtg tccaggtg tgcctgggtg tgcctgggtg  
tggtccactt caccatccc atgattatca tcttttctg ctatgggcag ctctcttca  
ccgtcaagga ggcgtgctg cagcagcagg agtcagccac cacacagaa gacagaaagg  
aggtcaccgc catggtcatc atcatggtc tgcctgggtg tgcctgggtg gtcctctacg  
ccagcgtggc attctacatc ttcaccacc aggcctcaca cctctgctc atctctatga  
ccatccacgc gttcttggc aagagcgccg ccactatc cctgtcatc tatatcatga  
tgaacaagca gttccggaac tgcattgctc ccactatc cctgtcatc aacctactg  
gtgacgatga ggcctctgct accgtgtcca agcggagag gagccaggtg gcccggcct  
aagacctgct taggactctg tggcgcacta taggcgtctc ccatccctc cactctccc  
cagccacagc catccaccca ggagcagcgc ctgtgcagaa tgaacgaagt cacataggct  
ccttaatttt tttttttttt ttaagaaata ataatgagg ctctcactc acctgggaca  
gctgagaag ggacatccac caagacctac tgatctggag tcccacgttc ccaaggcca  
gcgggatgtg tgccctcctt cctcccaact catcttctcag gaacacgagg attctgtctt  
tctggaaaag tgtccagct tagggataag tgtctagcac agaattgggc acacagtagg  
tgcttaataa atgctggatg gatgcaggaa ggaatggagg aatgaatggg aaggagaaac  
atatctatcc tctcagacc tgcagcagc agcaactcat acttggttaa tgatatggag  
cagttgtttt tccctccctg ggcctcactt tcttctcta taaaatggaa atcccagatc  
cctggtcctg ccgacacgca gctactgaga agacaaaag aggtgtgtgt gtgtctatgt  
gtgtgtttca gcaatttcta aatagcaaga agctgtacag atctagtta atgttgtgaa  
taacatcaat taatgtaact agttaattac tatgattatc acctcctgat agtgaacatt  
ttgagattgg gcaattcagat gatgggggtt caccacaact tggggcaggt ttttaaaaaat  
tagctaggca tcaaggccag accagggtg ggggttgggc tgtaggcagg gacagtcaca  
ggaatgcagg atgcagtcac cagacctgaa aaaaacacac tgggggaggg gacggtgaa  
ggccaaattc ccaatgagg tgagattggg cctggtgtct caccctagt gtggggcccc  
aggtccctg cctcccttc ccaatgtggc ccaatgtggc cctggtgtct cctcagcctt  
ctggaaagcca cctgctctt tgctctagca cctgggtccc agcatctaga gcatggagcc  
tctagaagcc atgctcacc gccacattt aattaacagc tgagtccctg atgtcatcct

Homo sapiens

306	4254	Rhodopsin	NP_000530.1	<p>tactcgaaga gcttagaaac aaagagtggg aaattccact gggcctacct tccttggggg</p> <p>tgttcattggg cccagatttc cagtttccct tgccagacaa gcccatcttc agcagttgct</p> <p>agtccattct ccattctgga gaattctgtc caaaaagctg gccacatctc tgaggtgtca</p> <p>gaattaagct gctctagtaa ctgtccccc ctaataagcc agaagctcta</p> <p>gctttacca gctctgctg gagactaagg caaattggcg cattaaaagc tcagctccta</p> <p>tggttgatt aacggtggtg ggttttgttg ctttcacact ctatccacag gatagattga</p> <p>aactgccagc ttccacctga tccctgacct tgggatggct ggattgagca atgagcagag</p> <p>caaagcagca cagagtcccc tgggggctaga ggtggaggag gcagtccttg gaatgggaaa</p> <p>aacccca</p>	<p>306</p> <p>NP_000530.1</p> <p>Rhodopsin</p> <p>Homo sapiens</p>
307	4284	Retinal G Protein-Coupled Receptor RPE	NM_002921	<p>agagacagct gggccactgg cagtgaagga gagtggat ggcagagacc agtgcctgc</p> <p>ccactggctt cggggagctc gagtgctgg ctgtgggat ggtgctactg gtggaagctc</p> <p>tctccggtct cagcctcaat accctgacca tcttctctt ctgcaagacc cgggagctgc</p> <p>ggactccctg ccactactg gtgtgagct tggctcttgc ggacagtggg atcagcctga</p> <p>atgcccctgt tgcagccaca tccagccttc tccggcgtg gccctacggc tgggacggct</p> <p>gccaggctca cggcttccag ggtttgtga cagcgtggc cagcatctgc agcagtgcag</p> <p>ccatcgcat gggcgcttat caccactact gcaccgttag ccagctggcc tggaaactcag</p> <p>ccgtctctct ggtgctcttc gtgtggctgt ctctgacct ctgggcagct ctgccccttc</p> <p>tgggttgggg tcaatatgac tatgagccac tggggacatg ctgcacctg gactactcca</p> <p>agggggacag aaacttcacc agtctctct tcacctgtc cttcttcaac ttgcacctgc</p> <p>ccctcttcat cagcatcact tccctacagt tcatggagca gaaactggg aagagtggcc</p> <p>atctccaggt aaacaccact ctgccagcaa ggacgctgct gctcggctgg ggcctctatg</p> <p>ccatcctgta tctatacgca gtcctgcag acgtgacttc catctcccc aaactgcaga</p> <p>tgggtcccg cctcattgac aaaaatggtgc ccacgatcaa tggcatcaac tatgcccctg</p> <p>gcaatgagat ggtctgcagg ggaatctggc agtgcctctc accgcagaag agggagaagg</p> <p>accgaaccaa gtgagcctgc caccctggag tgagccccag gccaggaggc tgttccagga</p> <p>gtcctgcca gcagcctcg tggccaagcc cagacactca cccaccttc ccagtggccc</p> <p>cgtggatcct ggtcctaggg tggacacagg attcagaaa acaccaggct gcacagaaa</p> <p>agccagatgg acctgagtg cgttcacagc cccctacact caaggctgag aggcctcagg</p> <p>aaagtcattc ctttttaaa ataataataa atgtaagggg gtacagtga gttttgttac</p> <p>atggatagat tgcctagtgg tgaagtctgg ccttttagt taaccatcac cctaataata</p> <p>tacgtttgac ccattaaagt atttctcat ccttaccctc tcccacctg tccaccttct</p> <p>gagcttccaa tgtctattat tccacactcc atgtccactg gtacacatta tttagctccc</p> <p>acttacaagt gagaacatgt ggtatttgac ttcca</p>	<p>307</p> <p>NM_002921</p> <p>Retinal G Protein-Coupled Receptor RPE</p> <p>Homo sapiens</p>
308	4284	Retinal G Protein-	NP_002912.1	<p>maetsalptg fgelevlavg mvllvealsg lslntltifs fcktpelrtp chllvlsal</p> <p>adsgislal vaatssllrr wpygsdgcqa hgfqgfvtaf asicssaaia wgrhyhctr</p>	<p>308</p> <p>NP_002912.1</p> <p>Retinal G Protein-</p> <p>Homo sapiens</p>

309	4321	Coupled Receptor	Secretin Receptor	NM_002980	SQLAWNSAVS LVLFWLSSA FWAALPLLGW GHYDEPLGT CCTLDYSKGD RNFTSFLFTM SFFNFAMPLF ITITSYSLME QKLKSGHLQ VNTTLPARTL LLGWGPYAIL YLYAVIADVT SISPKLQMPV ALIAKMVPTI NAINYALGNE MRCRGIWQCL SPQKREKDR K	Homo sapiens
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	acagggccgg ccggagccgg ggaccctcgg cggggcgctg agctcccgag cgggcagagg A gcagggcag ccggagccgg ggagccctc gggaacgtg cgggcacacat cggcccccac ctgtcgccg ccgtgcagca gctactactg ccggtgctgc tgcctcgcg cgcgactcg actggagccc tccccgact atgtgacgtg ctacaagtgc tgtgggaaga gcaagaccag tgcctgagg aactctccag agagcagaca ggagaccctgg gcacggagca gccagtgcc ggttgagg ggatgtggga caacataagc tgctggccct cttctgtgcc gggccggatg gtggagggtg aatgcccgag attcctccgg atgtcaca gcagaaatgg ttcctgttc cgaaactgca cacaggatgg ctggtcagaa accctccca ggctaatct ggctgtggc gttaatgtga acgactcttc caacgagaag cggcactct cctgctgaa cgtgaaagt atgtacacg tgggctacag ctctccctg gtcagtctc tggcgccct tggcactctc tgtgctttcc ggaggtccca ctgcactcg aactacatc acatgcacct gtctgtgctc ttcactcttc gtgctctg caactctc aaggaacgog tgcctcttc ctcatgtat gtcacctact gcgatacga caggcgggc tgcaagctgg tcaatgtgct gtccagtag tgcatactgg ccaactact ctggtgctg gtggaaggcc tctaccttca cacactctc gccatctct tcttctctga aagaaagtac ctccaggat ttgtggcatt cggatgggt tctccagcca ttttgttgc ttgtgggt attgccagac acttcttgg agatgttggg tgtcgggaca tcaatgccaa cgcactccatc tgggtgata ttcgtgtgctc tgtgactctc tccatctga ttaatttcat ccttttcata aacattctaa gaactctgat gagaaactt agaacccaag aaacaagagg aatgaagtc agccattata agcgcctggc caggctccact ctcctgctga tccccctct tggcatccac tacatgctc tgcctcttc ccagaggac gctatggaga tccagctgtt tttgaaacta gcccttggtc cattccaggg actggtggg gccgtctct actgcttct caatggggag gtgcagctgg aggttcagaa gaagtggcag caatggcacc tccgtgagt cccactgcac cccgtggct ccttcagcaa cagcaccag gccagccact tggagcagag ccagggcacc tgcaggacca gcatcatctg agaggctgga gcagggtcac ccacggacag agaccaagag aggtcctgag aagctgggc actgctgtg gacagccagt ctccccagca gacacctgt gctcctctc agctgaagat gcccctccc aggccttga ctctccgaa gggatgtgag gcaatgtgg gcaggacaag ggcctgggat ttggttcgt tgctctctg ggaagagaag ttcagggggtc ccagaaagg acagggaaat aaatgggtgc tgggatgaga ttc MRPHLSPPLQ QLLLPVLLAC AAHSTGALPR LCDVLQVLWE EQDQCLQELS REQTGLGTE P QPVPGCEGMW DNISCWPSV PGRMVEVECP RFLRMLTSRN GSILFRNCTQD GWSETFPRN LACGVNVNDS SNEKRHSYLL KLKVMYTVGY SSSLVMLLVA LGILCAFRRL HCTRNYTHMH LFVSFILRAL SNFIKDAVLF SSDDVTYCDP HRAGCKLMV LFQYICIMANY SWLLVEGLYL HTLLAISFFS ERKYLGQFVA FGWGSPIFV ALWAIARHMF EDVGCWDINA NASIWWIIRG PVILSILINF ILFINILRIL MRKLRTQETR GNEVSHYKRL ARSTLLLIPL FGIHYIVFAF SPEDAMEIQL FFELALGSFQ GLVAVLYCF LINGEVQLEVQ KKQQQWHLRE FPLHPVASFS NSTKASHLEQ SQGTCRTSII	Homo sapiens

311	4480	Somatostatin Receptor Type 1	NM_001049	atgtttcccca atggcaccgc ctctctctct ggggcccgcg tctctctctc ctagcccccag ccggggcagc	Homo sapiens
				tgcggcgaag gcggcgccag caggggcccc ggggcccgcg ctgcccgcag catggaggag	
				ccaggcgcaa atgctgccca gaacgggacc ttgagcgagg gccaggggcag cgccatcctg	
				atctctttca tctactccgt ggtgtgcttg gtggggcctg ttgggaactc tatggtcattc	
				tacgtgacc tgcgctatgc caagatgaag agcgccacca acatctacat cctaaatcttg	
				gccattgctg atgagctgct catgctcagc ttgcccctcc tagtcaacct cactgtgttg	
				cgccactggc ccttcggtgc gctgctctgc cgctcgtgc tcagcgtgga cgcggtcaac	
				atgttcacca gcatctactg tctgactgtg ctacgctgg accgtacctg ggcgtgggtg	
				catcccatca aggcggcccc ctaccgcccg ccacccgtgg ccaaggtagt aaacctgggc	
				gtgtgggtgc tatcgctgct cgtcatcctg cccatcgtgg tcttctctcg caccgcggcc	
				aacagcgacg gcacgggtgc ttgcaacatg ctcatgccag agcccgtca acgctggctg	
				gtgggcttcg tgtgttacac atttctcatg ggcttctgc tgcccgtgg ggctatctgc	
				ctgtgctacg tgcatacat tgctaagatg cgcattgtgg cctcaaggc cggctggcag	
				cagcgcaagc gctcggagcg caagatcacc ttaatggtga tgatggtggt gatggtgtt	
				gtcatctgct gtagtccctt ctactgggtg cagctgggta acgtgtttgc tgagcaggac	
				gacgccacgg ttagtcagct gtcggctatc ctgggctatg ccaacagctg cgccaaacct	
				atcctctatg gcttctctc agacaacttc aagcgtcttt tccaaagcat cctatgcctc	
				agctggatgg acaacgcccg ggagagcccg gttgactatt acgcccaccg gctcaagagc	
				cgtgcctaca gtgtggaaga cttccaacct gagaacctgg agtcggcgcg cgtcttccgt	
				aatggcacct gcacgtcccg gatcacgag ctccta	
312	4480	Somatostatin Receptor Type 1	NP_001040.1	MFPNGTASSP SSSPSPSPGS CGEGGSRGP GAGTAADGME PGRNASQNGT LSEGGQSAIL	Homo sapiens
				ISFIYSVVCL VGLCGNSMVI YVILRYAKMK TATNIYILNL AIADELLMLS VPFLVTSILL	
				RHWPFGALLC RLVLSDAVN MFTSIYCLTV LSVDRYAVV HPIKAARYRR PTVAKVNLG	
				VWVLSLLVIL PIVFSTRTA NSDGTACNM LMPEPAQRWL VGFLVYTFILM GFLLPVGALC	
				LCYVLIIAKM RMVALKAGWQ QRKRSEKKT LMVMVMVVF VICWMPFYV QLVNVFAEQD	
				DATVSQLSVI LGYANSCANP ILYGFLSDNF KRSFQRIICL SWMDNAEEP VDIYATALKS	
				RAYSVEDFQP ENLESGGVER NGTCTSRITT L	
313	4481	Somatostatin Receptor Type 2	NM_001050	atggacatgg cggatgagcc actcaatgga agccacacat ggctatccat tccatttgac	Homo sapiens
				ctcaatggct ctgtggtgtc aaccaacacc tcaaacccaga cagagccgta ctatgacctg	
				acaagcaatg cagtcctcac attcatctat ttgtgtgtct gcatcattgg gttgtgtggc	
				aacacacttg tcatttatgt catcctccgc tatgccaaga tgaagacct caccacacatt	
				tacatcctca acctggccat cgcagatgag ctcttcatgc tgggtctgccc ttcttggctt	
				atgcaggtgg ctctgggtcca ctggcccttt ggcaaggcca ttgtccgggt ggtcatgact	
				gtggatggca tcaatcagtt caccagcatc ttctgctga cagtcatgag catcgaccga	
				tacctggctg tgggtccacc catcaagtgc gccaaagtga ggagaccccc gacggcccaag	
				atgatcacca tggctgtgtg gggagtctct ctgctggtea tcttgcccat catgatatat	
				gctgggctcc ggagcaacca gtgggggaga agcagctgca ccatcaactg gccaggtgaa	
				tctggggctt ggtacacagg gttcatcatc tacacttca ttctggggtt cctggtaacc	
				ctcaccatca tctgtctttg ctacctgttc attatcatca aggtgaagtc cctgtgaatc	
				cgagtgggct cctctaagag gaagaagtct gagaagaagg tccccgaat ggtgtccatc	
				gtgggtggctg tcttcatctt ctgctggctt ccttctaca tattcaactg ttcttccgtc	

314	4481	Somatostatin NP_001041.1 Receptor Type 2	tccatggcca tcagcccccac ccagccctt aaaggcatgt ttgactttgt ggtggtcctc acatatgcta acagtgtgc caaccctatc ctatatgctt tcttgctga caacttcaag aagagcttcc agaagtctct ctgcttggtc aagtgagcg gcacagatga tgggagcgg agtacagta agcaggacaa atccggctg aatgagacca cggagacca gaggaccctc ctcaatgag acctccaaac cagtattga MDMADEPLNG SHTWLSIPFD LNSGVSTNT SNQTEPYVDL TSNVLTFIY FVVCIIIGCG P NTLVIYVILR YAKMKTITNI YILNLAIAD E LFMGLPFLA MQVALVHWPF GKALCRVVMVT VDGINQFTSI FCLTVMSIDR YLAVVHPIKS AKWRRPRTAK MITMAVWGS LLVILPIMIY AGLRNQNWR SSCTINWPG E SGAWYTGFI YTFILGFLVP LTIICLCYLF IIKVKSSGI RVGSSKRKKS EKKVTRMVS I VVAVFIFCWL PFYIFNVSSV SMAISPTPAL KGMDFVFWL TYANSCANPI LYAFLSDNFK KSFQNVLCIV KVSCTDDGER SDSKQDKSRL NETTETQRTL LNGDLQTSI	Homo sapiens
315	4482	Somatostatin NM_001051 Receptor Type 3	atggacatgc ttcattccatc atcgggtgtcc acgacctcag aacctgagaa tgcctcctcg A gctggcccc cagatgccac cctgggcaac gtgtcggcg gcccaagccc ggcagggctg gctgtcagtg gcgttctgat cccctggtc tacctggtg tgtcgtggt ggcctgctg ggtaactgc tggatcata tgggtcctg cggcacacg ccagccctc agtcaccaac gtctacatc tcaacctggc gtggccgac gagcttcca tgtggggtt gccctcctg gcgcccaga acgcccgtc ctactggccc ttcggctccc tcatgtgcc cctgtcatg gcggtggatg gcataacca gttcaccagc atattctgcc tgactgtcat gagegtggac cgtaacctg ccgtggta tccaccgc tggccgctt cggcacacg tccgtggcc gcacggta cgcggctgt gtgggtggcc tgaacctg tgggtgctc cgtgtggtc ttctcggag tgccccggc catgagcacc tgccacatg agtgcccg gccggcgcg gcctggcag cggcttcat catctacac gccgcactg gcttcttcg gccgtgctg gtcatctgc tctgtacct gctcatctg gtgaaggtg gctcagctg gcgccgggtg tgggacacct cgtgccagc gcgccggcg tccgaacga ggtcacgcg catgtggtg gcctggtg cgtcttctg gctgtgctg atgcccctt acgtgtcaa catgtcaac gtggtgtg cactgcccga gtagcctg tctttgggc tctacttct ggtgtggcg ctgcccctg ccaacagct tgccaaaccc atcctttat gcttctctc ctaccgttc aagcagggtt tccgcagggt cctgtgcgg cctcccgcg gtgtgcgag ccaggagccc actgtgggg ccccgagaa gactgaggag gaggatagg aggagagga tgggagagg agcaggagg ggggcaagg gaaggagatg aacggccgg tcaagcagat cagcagcct ggcaccagc ggcaggagc gcgccccag agatggcca gcaaggagca gcagctcta ccccaaagg cttccactg ggagaagtcc agcacgatgc gcatcagcta cctgtag MDMLHPSSVS TTSEPENASS AWPDPATIGN VSAGSPSAGL AVSGVLIPLV YLVVCVVGLL P GNSLVIYVVL RHTASPSVTN YILNLALAD ELFMGLPFL AAQNALSYP FGSLMCRIVM AVDGINQFTS IFCLTVMSVD RYLAVVHPT R SARWRTAPVA RTVSAAVWA SAVVLPVVV FSGVPRGNST CHMQWPEPAA AWRAGFIYT AALFFGFLN VICLCYLLIV VKVRSAGRRV WAPSCQRRR SERRVTRMV AVVALFVLCW PFYVNLIN VVCPLEPEA FFGLYFLVA LPYANSCANP ILYGFLSYR KQGFRRVLLR PSRRVRSQEP TVGPPEKTEE EDEEEDGEE SREGGKGKEM NGRVSQITQP GTSGQERPPS RVASKEQQLL PQEASTGEKS STMRI SYL	Homo sapiens
316	4482	Somatostatin NP_001042.1 Receptor Type 3		Homo sapiens



317	4483	Somatostatin NM_001052 Receptor Type 4	atgagcgccc cctcgacgt gcccccggg ggcgaggaag ggctggggac ggctggggccc A tctgcagcca atgccagtag cgtcccgcg gaggcgagg aggcggtggc gggcccggg gacgcgggg cggcgggcat ggtcgctatc cagtgcattc agcgctggt gtgctgggtg ggctggtgg gcaagccct ggtcatcttc gtgacatcct gctacgcca gatgaagacg gctaccacca tctacctgt caactggcc tagccgacg agctcttcat gctgagcgtg cccttcgtgg cctcgtcggc cgcctgcgc cactggccct tcggctcctg gctgcccgc gcgtgtcca gcgtcgacgg cctcaacatg ttcaccagcg tcttctgtct caccgtgctc agcgtgacc gctacgtggc cgtggcgac cctctgcgc cggcgacctt cactctccc agcgtggcca agctcatcaa cctggcggtg tggctggcat cctgttggc cactctccc atcgccatct tcgcagacac cagaccggct cggcgggcc aggcggtggc ctgcaacctg cagtggccac accggcctg gtcggcagtc ttcgtggctt acacttctt gctgggcttc ctgctgcccg tctggccat tggcctgtgc tacctgtca tcgtgggcaa gatcgcgcc gtggccctgc gcgtggctg gcagcagcg aggcgctcg agaagaaaat caccagcgtg gtgctgatgg tcgtggtcgt cttgtgtc tcgtggatgc ctttctact ggtcagcgtg ctgaacctcg tcgtgaccag cctgatgcc accgtcaacc acgtgtccct tatctcagc tatgccaa gctgcgcaa cctattctc tatggcttc tcctcgacaa cttcggcga tccttcagc ggttctctg cctgcgtgc tgcctcctg aagtgctgg agtgctgag gaggagcccc tggactacta tgcactgt ctcaagagca aagtgggc aggtgcatg tgccccccac taaatgcca gcaggaagcc ctgcaaccag aaccggccg caagcgcac ccccacca ggaaccacc cttctga	Homo sapiens
318	4483	Somatostatin NP_001043.1 Receptor Type 4	MSAPSTLPG GEEGLTAMP SANASSAPA EAEAAVAGPG DARAAGMAI QCIYALVCLV P GLVGNALVIF VILRYAKMT ATTYYLNL VADELFLMSV PFVASSAALR HWPFGSVLCR AVLSVDGLNM FTSVFCLTVL SVDRYAVVH PLRAATYRRP SVAKLINLGW WLASLVTLR IAIFADTRPA RGGQAVACNL QWHPAWSAV FVYTFLLGF LLPVLAIGLC YLLIVGKMRA VALRAGWQOR RRSEKKITRL VLMVVVFL CMMPFYVQL LNLVWTSIDA TVNHVSLILS YANSCANPIL YGFLSDNERR SFQRLCLRC CLLEGAGGAE EEPIDYYATA LKSKGGAGCM CPPLKCCQEA LQPEPGRKRI PLPTTTF	Homo sapiens
319	4484	Somatostatin NM_001053 Receptor Type 5	atggagcccc tgttcccagc ctccagccc agctggaagc cctctcccc ggggctgccc A tctggaggcg gtgacaacag gacgtggtg gggccggcg cctcggcagg gggccggcg gtgctgtgc cctgctgta cctgctgta tgtcgggcg gctggggcg gaacacgctg gtcatctacg tgggtgctgc ctcgccaag atgaagaccg tcaccaaat ctacattctc aacctggcag tggcgacgt cctgtacatg ctggggctgc cttctctggc cagcagaac gccggtcct tctggcctt cggcccgctc ctgtgccc cgtgtcatga cgtggacggc gtcaaccagt tcaccagtgt cttctgcctg acagtcatga gcgtggaccg ctacctggca gtggtgcacc cgtgagctc ggcgcgctg cgcgcgcgc gtgtggccaa gctggcgagc gccgcggcct ggttctgtc tctgtgcatg tcgtgcgc cctgtgtgt cgcggacgtg caggagggcg gtacctgcaa cgcagctgg cggagccc tggggctgtg ggcgcgcctc ttcatcct acacggcct gctgggctt tcgcgcgc tgcgtgtcat ctgctgtgc tacctgtca tcgtggtgaa ggtgagggcg gggggcgtgc cgtggcgctg cgtggcgcg cgctcgagc ggaagtgac gcgatggg tgggtgggtg tgcgtgtgt tgcgggatgt tggctgccc tcttaccgt caacatcgt aacctggcg tggcgctgcc cagagagccc	Homo sapiens

Homo  
sapiens

320 4484 Somatostatin NP\_001044.1 MEPLFPASTP SWNASSPGAA SGGDNRTLV GPAPSAGARA VLVPEVLYLLV CAAGLGNTL P

Receptor  
Type 5

gcttcgcgcg gcctctactt cttcgtgggtc atcctctcct acgccaacag ctgtgccaac  
 cccgtcctct acggcttctt cctgacaac ttcgcccaga gtttccagaa gttctgtgac  
 ctccgaaagg gctctgtgtg caaggacgct gacgccaagg agccggtcc agacaggatc  
 cgccagcagc aggaggccac gccgcccgcg caccgcccgc gcttatgcag  
 accagcaagc tgtga

VIYVLRFAK MKTVTNIYIL NLAVADVLYM LGLPFLATQN AASFVFPFV LCRLVMTLDG  
 VNQTSVFCL TVMSVDRLA VVHPLSSARW RRPVAKLAS AAAMVLSLCM SLPLLVFADV  
 QEGGTCNASW PEPVGLWGA VFIITAVLGF FAPLLVICLC YLLIVVKVRA AGVRVGCVRRA  
 RSEKVTIMV LVVVLVFA G WLPFFTVNIV NLAVLPQEP ASAGLYFFV ILSYANSCAN  
 PVLVYGLSDN FRQSFQKVL LKRGSGAKDA DATEPRPDRI RQQEATPPA HRAAANGLMQ  
 TSKL

Homo  
sapiens

321 4552 Tachykinin NM\_001058

Receptor 1

aattcagagc caccgcgggc aggcggggcag tgcattccaga agcgtttata ttctgagcgc A  
 cagttcagct ttcaaaaaga gtgctgccc taaaaagcct tccaccctcc tgtctgcttt  
 agaaggacc tgagcccccag gcgcccagca caggactctg ctgcagaggg ggttctgtga  
 cagatagtag gctttacgct tagcttcgaa atggataaag tcttcccgtt ggaactcagc  
 ctctcccccac acatctccac taacacctcg gaacccaatc agttcgtgca accagcctgg  
 caaattgtcc ttgtggcagc tgcctacacg gtcatgtgg tgacctctgt ggtgggcaac  
 gtggtagtga tgtggatcat cttagcccac aaagaatga ggaacagtgc gaactatatt  
 ctgggtgaacc tggccttcgc ggaggcctcc atggctgcat tcaatacagt ggtgaacttc  
 acctatgtg tccacaacga atggtactac ggcctgttct actgcaagtt ccacaacttc  
 ttcccatcg ccgctgtctt cgcagctatc tactccatga cggctgtggc ctttgatagg  
 tacatggcca tcatacatcc cctccagccc cggctgtcag ccacagccac caaagtggc  
 atctgtgtca tctgggtcct ggctctcctg ctggccttcc cccagggcta ctactcaacc  
 acagagacca tggccagcag agtcgtgtgc atgatcgaat ggccagagca tccgaacaag  
 atttatgaga aagtgtacca catctgtgtg actgtgctga tctacttctt cccctgctg  
 gtgattggct atgcatacac cgtagtggga atcacactat gggccagtgga gatccccggg  
 gactcctctg accgctacca cgaagcaagtc tctgccaagc tctgccaagc caaatgatg  
 attgtcgtgg tgtgcacctt cgcctctctg tggctgcctt tccacatctt ctctcctctg  
 cctacatca accagatct ctacctgaag agttttatcc agcaggtcta cctggccatc  
 atgtggctgg ccatgagctc caccatgtac aaccccatca tctactgctg cctcaatgac  
 aggttccgtc tgggcttcaa gcatgccttc cgggtgtgccc cctccatcag cgcggcgac  
 tatgaggggc tggaaatgaa atccaccggg tatctccaga cccagggcag tgtgtacaaa  
 gtcagccgcc tggagaccac catctccaca gtggtggggg ccacagagga ggagccagag  
 gacggcccca aggccacacc ctctgctcctg gactgacct ccaactgtct ttcacgaagt  
 gactccaaaga ccatgacaga gagcttcagc ttctctcca atgtgctctc ctaggccaca  
 gggcctttgg caggtgcagc cccactgccc tttagacctg cctccttcat gcatggaaat  
 tcccttcac tggaaaccatc agaaacacc tcacactggg acttgcaaaa aggttcagta  
 tgggttaggg aaaaattcc atccttgagt caaaaaatct caattcttcc ctatctttgc  
 caccctcatg ctgtgtgact caaaccaat cactgaactt tgcgtgacct gtaaaaataa  
 aggtcggacc agcttttctt caagagccca atgcattcca ttcttggaag tgactttggc

322	4552	Tachykinin Receptor 1	NP_001049.1	MDNVLPVDS KRMRTVTNYF YSMTAVAFDR MIEWPEHPNK SAKRKVVKMM NPIIYCCCLND VGAHEEPE	tgcatgcgag tgcctcattc aggatg	EPNQFQPAW MAAENTVWNF RLSATATKV TVLIYFLPL WLPFHIFLL RCCPFISAGD DLTSCSSRS	QIVLWAAAYT TYAVHNEWY ICVIWVLALL VIGYAYTVVG PYINPDLYK YEGLEMKSTR FSNNVLS	VIVVTSVVG GLFYCKFHN LAFPPQGYST TETMPSRVVC ITLWASEIPG KFIQQVYLAI MWLAMSSTMY YLQTQGSVYK VSRLETTIST	Homo sapiens
323	4687	Thrombin Receptor	NM_001992	ggcggggggc ggcgcccgag ccgcgcgcgc gctgcgcgag gcgaagaccg ggcgggcgag tgctgctggt ccgcgaggcc ggaaccccaa taactgaata cattcatctc catctgtgta tgttcatctc cggcagatgt gtgattggca tgtacgcctc atcccatgca tgtgggcttt tgccccgggt actatgccta ccacggctctg gcaagaagtc tcggaccacac cagaggctgc tcgacccctc tatgctgcaa gtaaaaatgga aggaatggg ttctattagt tgcatacctg aacaggacga aatgtcaact	gctcattc aggatg	agaggggctt gcagagactc cccgatcccg accctgatct ccgcgagagt cagcgccgag ttcagctctg gcaacaaatg gaacattttt tccatcaata tcgggatatt tttgtagtca gtcaagaagc tctgtgctcc gaattgtgct atgacagtca tgggaaaggc ctctcgtcct acctgtcatg gcttctctcg gtcttagctc ttcctgtcag ctgattgctc tacctctct tacgttctct gatccccaga agtaacctga ggttaaaaag actttattga gagctgtcaa ttattttagg gatgtgtcaa tattccaag ggaattatgc tatacatact ctaggtgaca tatatgtg	gctgaggagc ccggaggccc ctaaccgccc cacctcgcc ggagaagcgg gacaaatggg gtgtctgccc tccccggta ggagaaaaat tcttcaaaaa ctctttgtcc aaacatcatg gtacatgctg cagctattac tcttccggca tcagcatttt ccggtttctg tctcttcaat tgaaacccctg ttttgtgccg ttccgcagtt ctgcattctc accttctcac cagcagcata gaggtacgtc cagtgggcag atacaaaaag aacctgaact aaaagtgaat aaaacaacag ttgtcaatta ccagaaagat caatgctaca tataatgtag	A sapiens	

324	4687	Thrombin Receptor	NP_001983.1	<p> tgtatgcaca cacatatatt atttgcaagt cagtataaga taggcacttt aaaacactct  ttccccgcac ccagacaatt atgaaaaataa tctctgattc cctgatttaa tatgcaaaagt  ctaggttggg agagtttagc cctgaacatt tcatggtgtt catcaacagt gagagactcc  atagtttggg ctgtaccac ttttgcaaat aagtgtattt tgaattgtt tgacggcaag  gtttaagtta ttaagaggta agacttagta ctatctgtgc gtagaagtcc tagtgttttc  aattttaaac atatccaagt ttgaattcct aaaattatgg aaacagatga aaagcctctg  ttttgatag ggtagtattt ttacatttt acacactgtg cacataagcc aaaactgagc  ataagtcctc tagtgaatgt aggtgggtt tcagagtagg ctattcctga gagctgcatg  tgtccgccc cgatggagga ctccaggcag cagacacatg ccagggccat gtcagacaca  gattggccag aaaccttct ctgtgacctc acagcagtga gactggggcc actacatttg  ctccatctc ctgggattgg ctgtgaactg atcatgttta tgagaaactg gcaaaagcaga  atgtgatc ctgagaggta atgacctga aagacttctc taccatctt aaaacaaacg  aaagaaggca tggacttctg gatgccatc cactgggtgt aaacacatct agtagttgtt  ctgaaatgtc agttctgata tgggaagcacc cattatggc tgtggccact ccaataggtg  ctgagtgtac agagtggaat aagacagaga cctgcccctc agagcaaat agatcatgca  tagagtgtga tgtatgtga ataatatgt ttcacacaaa caaggcctgt cagctaaaga  agtttgaaca ttgggttac tattcttgt ggtataact taatgaaaac aatgcagtac  aggacatata ttttttaaaa taagtctgat ttaattggc actatttatt tacaatgtt  ttgctcaata gattgctcaa atcagggttt cttttaagaa tcaatcatgt cagctgctt  agaaataaca gaagaaaata gaattgacat tgaattctag gaaaattatt ctataattc  cattactta agacttaatg agactttaa agcattttt aacctctaa gtatcaagta  tagaaaaatc tcatggaatt cacaaagtaa ttggaaatt aggttgaaac atatctcta  tcttacgaaa aaatggtagc attttaaaca aaatagaag ttgcaaggca aatgttatt  taaaagagca gccaggcgc ggtggctcac gcctgtaac ccagcactt gggaggctga  ggcgggtgga tcacagggtc aggagatcga gaccatctg gctaacacg tgaaacccgt  ctctactaaa aatgcaaaaa aaattagccg ggcgtggtg caggcacctg tagtcccagc  tactcgggag gctgaggcag gagactggcg tgaacccagg agcggaacct tgtagtgagc  cgagatcgcg ccactgtgct ccagcctggg caacagagca agactccatc tc  MGPRRLIVA ACFSLCGPLL SARTRARRPE SKATNATLDP RSFLLRNPN KYEPPWEDEE P  KNESGLTEYR IVSINKSSPL QKQLPAFISE DASGYLTSSW LTLFVPSVYT GVFFVSLPLN  IMAIVVFILK MKVKKPAVVY MLHLATADVL FSVLPFKIS YYFSGSDWQF GSELCRFVTA  AFYCNMYASI LLMTVISDR FLAVVYPMQS LSWRTLGRAS FTCLAIWALA IAGVPLVLK  EQTIQVPLN ITTCHDVINE TLLEGYYAYY FSASFVFFF VPLIISTVCY VSIIRCLSSS  AVANRSKSR ALFLSAAVFC IFICFGPTN VLLIAHVSFL SHTSTTEAY FAXLLCVCS  SISSCIDPLI YYYASSEQR YVYSILCKE SSDPSSYNS GQLMASKMDT CSSNLNLSIY  KKLLT </p>	Homo sapiens
325	4734	Thyrotropin Releasing Hormone Receptor	NM_003301	<p> tagcttaag ccactgaaga tggaaaacga gacagtcaat gaactgaacc aaacacagct A  tcagccacga gcagtggtgg ccttagaata ccagtggtc accatcttac ttgtactcat  tatttggtgc ctgggcattg taggcaacat catggtagtc ctggtgtgca tgagaaccaa  gcacatgagg acccccacaa actgctacct ggtgagctg gcagtagctg atctcatggt  cttggtggcc gcaggcctcc ccaacataac agacagtatc tacggttctt ggtgtatgg </p>	Homo sapiens

326	4734	Thyrotropin Releasing Hormone Receptor	NP_003292.1	ctatgttggg tgcctctgca ttacttacct ccagtatttg ggaattaatg catcctcttg ttcaataaca gcctttacca ttgagaggtg catagcaatc tgtcacccca tcaaaagccca gtttctctgc acattttcca gagcaaaaa gattatcatc ttgtctggg cttcacatc tccttactgt atgctctggt tcttcttgct ggatctcaat attagcacct acaaaagatgc tattgtgata tccgtgggct acaagatctc caggaattac tactcaccta ttacctaat ggactttggt gtcttttatg ttgtgccaat gatcctggct accgtcctct atggattcat agctagaatc cttttcttaa atccattcc ttcatgctc aaagaaaact ctaagacatg gaaaaatgat tcaaccatc agaacacaaa tctgaatga aatacctcta atagatgttt caacagcaca gtatcttcaa ggaagcaggt caccagatg ctggcagtg ttgtaattct gtttgacctt ttatggatgc cctacaggac tctagtgtt gtcaactcat ttctctccag tcctttccaa gaaaattggt tttgtctct ttgcagaatt tgcatttatt tcaacagtg catcaaccgc gtgatttaca atctcatgtc ccagaaattc cgtgcagcct tcagaaagct ctgcaactgc aagcagaagc caacagagaa accgtctaac tacagtgtg cctaaatta cagcgtcatc aaggagtcag accattttcag cacagagctt gatgatata ctgtcactga cacttaacctg tctgccaaa aagtgtcttt tgatgacacc tgcttggtct ctgaggtatc ctttagccaa agttgattca tgaattagaa gaaaatggat gacaaagaaa ttgagaatct gtcagtcac caacaaaagg gagaacatgg ccaatagtc tatgtgaaga cagagcagat cagctcttgt caatgctcta acaaacgg	Homo sapiens
327	4944	Angiotensin II Type 1 Receptor	NM_000685	attcggagct gcctcctgc caatgattcc agcgcctgac agccaggacc ccaggcagca A gcgagtga ca gacgtctg accggcgcgc cgtagcagc tctgccggc cgcgccggtg atcgatggg agcggtctga gcgacccag cgagtggg cgacacagcc ggacgcgag gcggcgccg ggaacccgc accagcgcg cgccctcg gcgggacgtg acgacgccc cgggcgccg gttgatatt tgacaaattg atctaaaatg gctgggtttt tatctgaata actcactgat gccatcccag aaagtccgca ccaggtgtat ttgatatagt gtttgaaca aattcgacc aggtgatcaa aatgattctc aactcttcta ctgaagatgg tattaaaga atccaaagat attgtcccaa agctggaagg cataattaca tatgtgtcat gattcctact ttatacagta tcatctttgt ggtgggaata ttgggaaca gcttgggtgt gatagtcatt tacttttata tgaagctgaa gactgtggcc agtgtttttc ttttgaattt agcactggct gacttatgt tttactgac ttgtccacta tgggctgtct acacagctat ggaataccgc tggcccttg gcaattacct atgtaagatt ctttcagcca cgttcagttt caacctgtac gctagtgtg ttctactcac gtgtctcagc attagcgaag ccttggtat tgttcaacca atgaagtccc gccttcgacg cacaatgctt tagccaaaag tcacctgcat catcattgg ctgctggcag gcttgccag tttgccagct ataattccatc gaaatgtatt ttctattgag aacaccaata ttacagtgtg tgccttccat tatgagtcctc aaattcaac ccttcgata	Homo sapiens

328	4944	Angiotensin II Type 1 Receptor	NP_000676.1	<p>gggctgggccc tgacacaaaaa tatactggggt ttctgtgttc cttttctgat cattcttaca  agttatactc ttatttggaa ggccttaaa aaggcttatg aaattcagaa gaacaaacca  agaaatgatg atatttttaa gataattatg gcaattgtgc ttttctttt cttttcctgg  attcccacc aaatattcac ttcttggtat gtattggcat aactaggcat ctagctgac  tgtagaattg cagatatgtt ggacacggcc atgctatca ccatittgat agcttatttt  aacaattgcc tgaatcctct tttttatggc ttctgtggga aaaaatttaa agatatattt  ctccagcttc taaaatatat tccccaaaa gccaaatccc actcaaacct tcaacaaaa  atgagcagc ttctctaccg cccctcagat aatgtaagct catccacca gaagcctgca  ccatgttttg aggttgagtg acatgttcga aacctgtcca taaagtaatt ttgtgaaaga  aggagcaaga gaacattcct ctgcagcact tcactaccaa atgagcatta gctacttttc  agaaatgaag gagaaaatgc attatgtgga ctgaaaccgac ttttctaaag ctctgaacaa  aagcttttct ttcttttgc aacaagacaa agcaaaagcca cattttgcat tagacagatg  acggctgctc gaagaacaat gtcagaaact cgatgaatgt ttgtatttga gaaattttac  tgacagaaat gcaatctccc tagctgctt ttgtcctgtt attttttatt tccacataaa  ggtattttag atatattaaa tctgttagag agcaaacagga gatgagagtt ccagatttgt  ctgtccagtt tccaaaggcc agtaaaagtt tctgtccggt ttccagctat tagcaactgt  gctacacttg cacctgggtac tgcacatttt gtacaaaagt atgctaagca gtagtctca  agttgcagat ctttttttga aattcaacct gtgtcttata ggtttacact gccaaaacaa  tgccccgaag atggcttatt tgtataatgg tgttactaaa gtcacatata aaagttaaac  tacttgtaaa ggtgctgcac tgggtcccaag tagtagtgtc ctcttagtat attagtttga  tttaatatct gagaagtgtg tatagtttgt ggtaaaaaga ttatatatca taaagtatgc  cttctgtttt aaaaaaagta tataattctac acatatatat atatgtatat ctatatctct  aaactgctgt taattgatta aaactgtgga aagtatatatt tactttaaaa taaaaataatt  ttattgc</p>	Homo sapiens
329	4946	Angiotensin II Type 2 Receptor	NM_000686	<p>IKRIQDDCPK AGRHNYIFVM IPTLYSIIFV VGIFGNSLVV IVIYFYMKLK P  TVASVFLLNL ALADLCFLLT LPLWAVYTAM EYRWPFNGYL CKIASASVSE NLYASVFLLT  CLSIDRYLAI VHPMKSLRR TMLVAKVTCI IIWLLAGLAS LPALIIHRNV FIENTNITVC  AFHYESQNST LPIGLGLTKN ILGFIFPFLI ILTSYTLWK ALKKAYEIQK NKPRNDDIFK  IIMAVLFFF FSWIPHQIFT FLDVLIQLGI IRDCRIADIV DTAMPITICI AYFNCLNPL  FYGFLGKKFK RYFLQLLKYI PPKAKSHSNL STKMSTLSYR PSDNVSSSTK KPAPCFEVE  acgtcccagc gtctgagaga acgagtaagc aagaattcaa agcattctgc agcctgaatt A  ttgaaggagt gtgtttaggc actaagcaag ctgatttatg ataactgctt taaacttcaa  caaccaaagg cataagaact aggagctgct gacatttcaa tatgaagggc aactccaccc  ttgcccactac tagcaaaaaac attaccagcg gtcttcaact cgggcttctg aacatctctg  gcaacaatga gtctaccttg aactgttcac agaaaccatc agataagcat ttagatgcaa  ttcctattct ttactacatt atatttgtaa ttggatttct ggtcaatatt gtcgtgggta  cactgttttg ttgtcaaaa ggtcctaaaa aggtttctag catatacatc ttcaacctcg  ctgtgggtga ttactcctt ttggctactc ttctctctag ggcaacctat tattcttata  gatagtactg gctctttgga cctgtgatgt gcaaaagttt ttgttctttt cttacctga  acatgtttgc aagcattttt ttatcacct gcagagtgt tgataggtac caatctgtca  tctacccctt tctgtctcaa agaagaaatc cctgggaagc atcttatata gttcccttg</p>	Homo sapiens

330	4946	Angiotensin II Type 2 Receptor	NP_000677.1	<p>           tttggtgtat ggctgttttg tctcattgc caacatttta ttttcgagac gtcagaacca            ttgaatactt agagtgtaat gcttgcattha tggctttccc acctgagaaa tatgccaat            ggtcagctgg gattgcctta atgaaaaata tcttggtttt tattatccct ttaatatca            tagcaacatg ctattttgga attagaaac acttactgaa gacgaatagc tatgggaaga            acagataac cgtgaccaa gcttgacaa gcttgacaa gcttgacaa gcttgacaa            tttggtgctt tcccttccat gttctgacct tcttgacct tcttgacct atgggtgtca            ttaatagctg cgaagtata gactgcattg acctggcact tcttttgcc atcctctgg            gattaccaa cagctgcgtt aatcgtttc tgtattgtt tgttgaaaac cgttccaac            agaagctccg cagtgtgtt aggttccaa tctctggct ccaagggaaa agagagagta            tgtcttgccg gaaaagcagt tctcttagag aatggagac ctttgtgtct taaacggaga            gcaaaatgca tgtaatacaac atggctactt gctttgaggc tcaccagaat tatttttaag            tggttttaat aaaaataaa aattccctt aatctttctt gaatcttctg aaaccaaag            taactatgtt tctgtccag tgactttcag gaatgcccct tgttttctga tatgtttgta            caagatttca ttggtgagac atatttaca cctagaagta actggtgata tatctcaaat            tgtaattaat aatagattgt gaataatgat ttggggattc agatttctct ttgaacatg            cttgtgttcc ttagtgggtt tttatatcca tttttatcag gatttctctt tgaaccagaa            ccagcttttc aactcattgc atcatttaca agacaacatt gtaagagaga tgagcacttc            taagttgagt atattataat agattagtag tggattattc aggttttagg catatgcttc            tttaaaaacg ctataaatta tttctctctt gcatctcact tgagtggagg tttatagtta            atctataact acatatgaa tagggctagg aatatagatt aatcactact cctatgcttt            agcttatttt tacagtata gaaagcaaga tgtactataa catagaattg caatctataa            tatttgtgtg ttcactaaa cctgaataag cactttttta aaaaactttct actcatttta            atgattgttt aaaggtttct attttctctg atactttttt gaaatcagta aacactgtgt            attgtgttaa aatgtaaaag tcacttttca catccttgac tttttagatg tgctgctttg            atatatagga cattgatttg atttttatta ttaatgcttt ggttctgggt tgttctctaa            aatatctggg tggcttaaaa aaaaactcttt aacttgtaat aaacctttaa ctggcatagg            aaatggtatc cagaatggaa ttttgctaca tgggtgtctg gtgggggcaa agagacccag            tcaattacat gtttggtagc aagaaaggaa cctgtcaggg cagtacaatg tgactttgaa            aatatatacc gtgggggtag ttttacccta tatctataaa cactgtttgt tccagaatct            gtatgattct atggagctat ttttaaccaa ttgcaggtct aga            UNIVVTLFC QKGPVKVSS IYIFNLAVAD LLLLATLPLW ATYYSRYDW LFGPVMCKVF            GSFLTLMFEA SIFFITCMV DRYQSVIYPF LSQRNPWOA SYIVPLVWCM ACLSSLPTFY            FRDVRTIEYL GVNACIMAF PEKYAOWSAG IALMKNILGF IIPLIPIATC YFGIRKHLK            TNSYGNRIT RDQVLKMAA VVLAFLIWL PFHVLTFDA LAWMGVINSC EVIAVIDIAL            PFAILLGFTN SCVNPFLYCF VGNRFQOKLR SVFRVPIITWL QGKRESMSCR KSSSLREMET            FVS         </p>	Homo sapiens
331	5072	Pyrimidinerg ic Receptor P2Y4	NM_002565	<p>           atggccagta cagagtcctc cctgttgaga tccctaggcc tcagcccagg tccctggcagc A            agtgaggtgg agctggactg ttggtttgat gaggatttca agttcatcct gctgctgtg            agctatgcag ttgtctttgt gctgggcttg gctgcttaacg ccccaacctt atggctcttc            atcttccgcc tccgaccctg ggtatgcaacg gccacctaca tgttccacct ggcatgtgca         </p>	Homo sapiens

332	5072	Pyrimidinergic NP_002556.1 ic Receptor P2Y4	gacacctgt atgtgtgtc gctgcccacc ctcatctact attatgcagc ccacaaccac tgcccccttg gactgagat ctgcaagttc gtccgcttcc ttttctattg gaacctctac tgactgtcc ttttctcac ctgcatcagc gtgcaccgct accctgggcat ctgccacca cttcgggac tacgtggtg ccgcccctgc cgtgcccac ctgttcttg tcacaaccag caacaagg ttggtgtag ccggtgctt cactacatga caccactcg cctgaagagt ttgaccacta tgtcacttc accacctcc tctggtggt tcatggggt gctcttggc gtgcccctgc tggcactct tgttgcctat agctcgggg gactcaggt ctgctgacct gctacagccc ttgcccagct ctgcacagtc gcttctgc ctcgtcttc tccgacct agctgtgtg ctgactgtct ttgctgtctg ctctgtgctt ttccacatca cccgcacct ttactacct gccaggctgt tggaaagctga ctgcagagta ctgaacattg tcaactgtgt ctataaagt actcggccc ttgcccagct caacagctgc ctggatcctg tgcctactt gctcactgg gacaaatc gactcagct ccgtcagctc tgtgtgtgtg gcaagcccca gccccgacg gctgacctt ccctggcact agtgcctctg cctgaggata gcagctgcag gtggggcgcc acccccagg acagtagctg ctctactct agggcagata gattgtaa MASTESSLLR SLGLSPGPGS SEVELDCWFD EDFKILLPV SYAVFVLGL GLNAPTLWLF P IFRLRPWDAT ATYMFHLALS DTLVLSLPT LIYYAAHNN WPFGEICKF VRFLFYNNLY CSVLFLTCIS VHYLGICHP LRALRWGRPR LAGLLCLAVW LVVAGCLVPN LFFVTTSNKG TTVLCHDTR PEEFDHYVHF SSAVMGLLFG VPLVTLVY GLMARRLYQP LPGSAQSSSR LRLRTIAV LTVFVCFVP FHITRTIYLL ARLEADCRV INIVNVYKV TRPLASANSC LDPVLYLLTG DKYRRQLRQL CGGKPKPRT AASSIALVSL PEDSSCRWAA TPQDSSCSTP RADRL	Homo sapiens
333	5117	Vasopressin NM_000706 V1A Receptor	taattgcttg aagattttt tccagacagg tggctgtgaa acctttacc tattaccttc A catccctgaa ccatttcaat ctctgcctc ctggatatct tggagaaaa gaaccaacac aacacagctt tcagttttta gagcatttc ccatacaga acattgtctt acttgatctt cccgatgacc tcaacaacag gaaaggcagg tcttttcat tccatttata agacgcacag accagagatt atctagccac aggaagcagg actccagatt tcaagtcag catctcaacg tgacaacctt ggtaactctg catgaacgga ctggatagta aagtggaaatt attactgaga actgcaatga ataaaactt ttgcatcttt tgcctacgtt tcacagaggg tgatatcttt ctgaggcaat taaatttata ccacggccac aatactgaaa cgttctgacc acaaaagtca tgctcctgca tctacacagc agataaactgc agaaacggct tctttcttc ctgtaaaaat tgctgaaaa cagctcccc ttgctgtccg tcgaggcata tcttcaccaa cgttaaaaa gagctgaggg agatcgcat tctgctccc tcccgcctg cagaggggct ccagctgttc agagtaacgg attactaggt aggtgtgtgt tccccctct tcccagggc tcttctctt ctttgagatt gcctcttct tactcctgag cacaggagcc gggcggttt tctgtccctt gccctggaca gcaactgctg gatggcgtt gtccggcagc tgcctctgt ccacaaaa agatgtccc acgactcagt agtaaccaga cgttccccac ggaccactgc ggcaaat cgccatccc cgctgtgga atcaggcttt tcccgcagaa aacccaggag atctagagaa aactccttaa gtccctagtc tccatagaga aaaccaggag acactcccc caaaccgcg tgtgaataca ggacacagc ccaactggggc ctgaaagtga tgagtgcgtt ctccgctg caaactagg gtaataata gcatgcatca aagacgttac taggaagaga tagctcttta	Homo sapiens



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acaagaacaa atacacttta ttaataaac cataaatcaa ttcattgtgt atgagactgt  
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aatggaaaaa tgcgttacta aaatatgcag gctgatctcc cagaataaca acagaagtta  
tatttttaaa gaaaaaatca taaccacct agctttatat tttgtgttta gttctttta  
tttctattc taacataagt aagacttgat tggtttaaaa gtcacataaa atgcggcact

334	5117	Vasopressin V1A Receptor	NP_000697.1	<p> attttgaac aaagagagct catcatcagt cttaatatct agagaaaaact tcagagaaaa  tatgttttca tccattaaaa ttaatttgtg catcagaaaaa tgcagcctta aacagtgtcc  aggagatggg atggtacctc ctaggagtag aagtgcctgg ggtgtaata gctcctgtcc  attgtggcca gtttagagtt ctattagaag ctcttcacat ctttgcatct caaatggta  actttacaac tggcagtggc ctctttttgg ttcttcacat attattggct aagaaaaagca  tgaaaaactga gatgctgaag gtgagaggaa atgttgactg gccaaaaata tctttttcc  cccactgcaa gttgtttta aagtcagatt tgtataagg aagccaaatt ttattaaaag  agtagaaaag gattgcttaa ggtactctgg actttctct ggacattgta aacgtatttt  gatcagtatt acaagggtat cctgtgctat gctggacatt acaagatca ttatcttcatt  gtttggggaa ttc </p>	Homo sapiens
335	5118	Vasopressin V1B Receptor	NM_000707	<p> MRLSAGPDAG PSGNSSPWPP LATGAGNTR EAEALGEGNG PPRDVRNEEL AKLEIAVLAV P  TEFAVVLGNS SVLLALHRTF RKTSRMHLFI RHLSLADLAV AFFQVLPQMC WDITYRFRGP  DWLCRVVKHL QVFGMFASAY MLVVTADRY IAVCHPLKTL QQPARRSRML IAAWVLSFV  LSTPOYFVFS MIEVNNVTKA RDCWATFIQF WGSRAYVTWM TGGIFVAPV ILGTCYGFIC  YNIWCNVRGK TASRQSKGAE QAGVAFQKGF LLAPCVSSVK SISRAKIRTV KMTFVIVTAY  IVCWAPFFII QMWSVWDPMS VMTSENPFI TITALLGSLN SCCNPWIYMF FSHLLQDCV  QSFPCQNMK EKENKEDTDS MSRRQTFYSN NRSPTNSTGM WKDSPKSSKS IKFIPVST  ctccagcgc tgctcaccag gcagagcgag cgggcttggc tggggcttcc tgcctgagc A  gcgacaccca ctgctccgga cgcgcctcc aagcaggctg aaggccttcc gctcttggct  tccagaaaaa tttggagaaa gagaatttga ggcggattgg aggggtggtag cccctcccca  gccttcttcc tctccagaaa cctcactct gcacagcgtc cccattctt cccgtcttga  ttccccatct tctgacccc tcttctccc tctctgggt cgatcccat cacttttct  cttccgaat ctcatctcc ctctctctct ctatcccat ctctgaacg atttccgct  atttggaaac ctctccctg tcatctcaa cgcttctct tctctccac ctcccctgccc  actccatttt atccatcaaa cctctccact tggatccaca cctcccttc atcttccct  ccagcaaac ctgtctcatg gattctgggc ctctgtggga tggcaacccc accctcggg  gcacctctc tggccccaat gccacaacac cctggctggg ccgggatgag gactggcca  aggtggagat cggagtctct gccactgtcc tgggtctggc gaccgggggc aacctggctg  tgctgtgac cctgggcca cttggccgca agcgtcccgc catgcacctg ttctgtctgc  acttagccct gacagacctg gccgtggcgc tcttccaggt ctgcccacag ctgctgtggg  acatcaccta cgccttccag gcccgcgacc tctgtgcag gccgtcaag tacctgcagg  tgctcagcat gttgctctcc acctacatgc tgggtggccat gacgtggac cgtacctgg  ctgtctgtca cccctgcgc agcctccagc agccaggcca gtcacacctac ctgctcatcg  ctgtcccttg gctgtggcc gccattctca gctccctca agtcttcatt tttccctgc  gggaggtgat ccagggtca ggggtgttgg actgtctggc agacttcggc ttcccttggg  ggccacgggc ctacctcacc tggaccaccc tggctatctt cgttctgccc gtgacctgc  tcacggcctg ctacagcctc atctgcatg agactgttaa aaacctaaaa gtcaagacac  aggcctggcg ggtgggagga gggggtggga ggaactggga caggccctca cttccacct  tagctgccac cactcggggg ctgccatctc ggttcagcag catcaacacc atctcacggg  ccaagatccg aacagtgaag atgaccttg tcatcgtgct ggctacatc gcttgcctggg  ctcccttctt cagtgtccag atgtgggtccg tgtgggacaa gaatgccct gatgaagatt </p>	Homo sapiens

Homo sapiens

336 5118 Vasopressin NP\_000698.1 MDSGPLWDAN PTPRGTLAP NATFWLGRD EELAKVEIGV LATVLVLTATG GNLAVLLTLG P  
V1B Receptor  
QLGRKRSRMH LFLVHLALTD LAVALFQVLP QLLWDITYRF QGPDLLCRV KYLQVLSMFA  
STYMLLAMTL DRYLAVCHPL RSLQPGQST YLLIAAPWLL AAFSLPQVF IFSLREVIQ  
SGVLDCWADF GFWGPRAYL TWTLAIFVL PVMTLTACYS LICHEICKNL KVKTQAWRVG  
GGWRWTWDRP SPSTLAATR GLPSRVSSIN TISRAKIRTV KMTFVIVLAY IACWAPFFSV  
QMWVSWDKNA PDEDSTNVAF TISMLLGNIN SCCNPWYMG FNSHLLPRPL RHLACCGFPQ  
PMRRLSDG SLSSRHHTLL TRSSCPATLS LSLSLTSLGR PRPEESPRDL ELADGEGTAE  
TIIF

Homo sapiens

337 5119 Vasopressin NM\_000054 agaatatcct gggttctgtg catcgtctg tctgaccatc cctctcaatc ttccctgccc A  
V2 Receptor  
aggactggcc atactgccac cgcacacgtg cacacacgcc aacaggcatc tgccatgctg  
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338	5119	Vasopressin V2 Receptor	NP_000045.1	MLMASTTSAY PGHPSLPSLP SNSSQERPLD TRDPLLARAE LALLSIVFVA VALSNGLVLA P ALARRRRRGH WAPIHVFI GH LCLADLAVAL FQVLPQLAWK ATDRFRGPDA LCRVVKYLQM VGMVYASSYMI LAMTLDHRRA ICRPMLAYRH GSGAHWNRPV LVNAWAFSLLL SLPLQIFFAQ RNVEGSGSVT DCWACFAEPW GRRYVVTWIA LMVFAVPTLG IAACQVLIFR EIHASLVPGP SERPGGRRRG RRTGSPGEA HVSAAVAKTV RMTLVIVVY VLCWAPFFLV QLWAAWDPEA PLEGAPFVLL MLLASLNSCT NPWIYASFSS SVSSELSRL CCARGRTPPS LGPQDESCCT ASSSLAKDTS S gaataagcct tggataatta tgaagggtgt ttcgggtatct tccctccaaa atgctaagaa A ataatttagg caacagttca gactctaaaa atgaagatgg ctcggtcttt tcacagactg aacacaatat tgttgcaact tacttgatta tggcaggtat gataagtatt atcagcaaca taatagttct gggcatcttc attaatgaca aggaactctg gacacccaca aatgcaatta ttataacct ggcgtttact gatatagggg tcagtagctg tggctatccc atgtctgctg cctcagatct gtatggaaat tggaaaattg gatacgcagg ctgtcaggtt tatgtctggt tgaatatatt ttttggaatg gcaagcattg gattactcac ggtcgtggt gtggaccgat acctgacct ctgccttctt agcctggatc aatggcctgt tttgggcttt gatgcctatc atagggtggg tgattctggg agcctggatc actggtgcta cgtgtacct aaactggagg aaaaatgata ctagttatgc ccagatcct actggtgcta cgtgtacct aaactggagg aaaaatgata gatcttttgt gtcttacacc atgacagtta ttgcgataaa ttttattgtg ccttgacag tgatgtttta ctgctattac catgtcacgc tatccattaa acatcacact accagtgaat gcatgtatc cctcaacaga gactggtcag atcagataga tgtaacaaa atgtctgtga tcatgatctg catgtttctg gtggcatggt ccccttattc catcgtgctg tttgggctt cttttggtga cccaaagaag attctcccc ccatggccat catagctcca ctgttgcaa aatctctac attctataac cctgcatctt atgtggttgc taataaaaa tttcggagggg caatgcttgc catgttcaaa tgtcagactc accaaacaat gctgtgaca agtatattac ccatggatgt atctcaaac ccattggctt ctggaagaat ctgaaataag agaaaaggac acgctatcaa aacactttag tttttgaca atgcttttct tttaaatatg agccattta gatcaagtgc agacatggat catgtctcta tgagagtga agtctctcaa gcacagtctg tgcttccgtt tgtgactct ggcgtctgta gtgatgtcc ctctgtgccc tgatatatca acttattgct catctcctt gatgaattag gcatcagagg ttaagggtccc cttcttctt	Homo sapiens
339	5133	Peropsin	NM_006583	gaataagcct tggataatta tgaagggtgt ttcgggtatct tccctccaaa atgctaagaa A ataatttagg caacagttca gactctaaaa atgaagatgg ctcggtcttt tcacagactg aacacaatat tgttgcaact tacttgatta tggcaggtat gataagtatt atcagcaaca taatagttct gggcatcttc attaatgaca aggaactctg gacacccaca aatgcaatta ttataacct ggcgtttact gatatagggg tcagtagctg tggctatccc atgtctgctg cctcagatct gtatggaaat tggaaaattg gatacgcagg ctgtcaggtt tatgtctggt tgaatatatt ttttggaatg gcaagcattg gattactcac ggtcgtggt gtggaccgat acctgacct ctgccttctt agcctggatc aatggcctgt tttgggcttt gatgcctatc atagggtggg tgattctggg agcctggatc actggtgcta cgtgtacct aaactggagg aaaaatgata ctagttatgc ccagatcct actggtgcta cgtgtacct aaactggagg aaaaatgata gatcttttgt gtcttacacc atgacagtta ttgcgataaa ttttattgtg ccttgacag tgatgtttta ctgctattac catgtcacgc tatccattaa acatcacact accagtgaat gcatgtatc cctcaacaga gactggtcag atcagataga tgtaacaaa atgtctgtga tcatgatctg catgtttctg gtggcatggt ccccttattc catcgtgctg tttgggctt cttttggtga cccaaagaag attctcccc ccatggccat catagctcca ctgttgcaa aatctctac attctataac cctgcatctt atgtggttgc taataaaaa tttcggagggg caatgcttgc catgttcaaa tgtcagactc accaaacaat gctgtgaca agtatattac ccatggatgt atctcaaac ccattggctt ctggaagaat ctgaaataag agaaaaggac acgctatcaa aacactttag tttttgaca atgcttttct tttaaatatg agccattta gatcaagtgc agacatggat catgtctcta tgagagtga agtctctcaa gcacagtctg tgcttccgtt tgtgactct ggcgtctgta gtgatgtcc ctctgtgccc tgatatatca acttattgct catctcctt gatgaattag gcatcagagg ttaagggtccc cttcttctt	Homo sapiens

340	5133	Peropsin	NP_006574.1	ccctattatg gcatgcatta cactgtactg atgacacctta acttgccctgg ctcc	Homo sapiens
				MLRNNLGNSS DSKNEDGSVF SQTEHNIVAT YLIMAGMISI ISNIIVLGIF IKYKELRTPPT P	
				NAILIINLAVT DIGVSSIGYP MSAASDLYGS WKFGYAGCQV YAGLNIFFGM ASIGLLTVVA	
				VDRYLITICLP DVGRRTMTNT YIGLILGAWI NGLFWALMPI IGWASYAPDP TGATCTINWR	
				KNDRSEFSYST MTVIAINFIV PLTVMFYCY YHTLSIKHHT TSDCTESLNR DWSDDQIDVTK	
				MSVIMICMFL VAWSPYSIVC LWASFGDPKK IPPPMALIAF LEAKSSTFYN PCIYVVANKK	
				ERRAMLAMFK CQTHQTMPVT SILPMDVSQN PIASGRI	
341	5519	Brain-Specific Angiogenesis Inhibitor 1	NM_001702	ggacttttaga agccgttggc gccctctctg tcacctgaag cggggccctc tcccatccca A	Homo sapiens
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344 5520 Brain- NP\_001694.1 Homo sapiens  
 Specific  
 Angiogenesis  
 Inhibitor 2

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Homo  
sapiens

P

NP\_001695.1

Brain-  
Specific  
Angiogenesis  
Inhibitor 3

5521

346

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SMNELSNPCL KKNSELRRRT VYLCTDDNLR GADMDIVHPQ ERMESDYIV MPRSSVNNQP  
SMKEESKMI GNETLPHERL LHYKVNPEFN MNPVMDQFN MNLEQHLAPQ EHMQLPFEP  
RTAVKNFMAS ELDDNAGLSR SETGSTISMS SLERRKSRYS DLDFEKVMHT RKRHMELEFQE  
LNQKFQTLDR FRDIPNTSSM ENPAPNKNPW DTFKNPSEYP HYTTINVLDT EAKDALELRP  
AEWEKCLNLP LDVQEGDFQT EV

NM\_006564

SIV/HIV  
Receptor  
BONZO

6031

347

Homo  
sapiens

A

gcagaccttg cttcatgagc aggtcatct ctggaacaaa ctggcaagc atctctgtg  
gtgttcatca gaacagacac catggcagag catgattacc atgaagacta tgggttcagc  
agtttcaatg acagacagcca ggaggagcat caagacttcc tgcagttcag caaggtcttt  
ctgacctgca tgtacctggt ggtgtttgtc tgtgtgtctg tggggaactc tctggtgctg  
gtcatatcca tcttctacca taagtgcag agcctgacgg atgtgttctt ggtgaaccta  
ccccggctg acctggtgtt tgtctgcat ctgacctatg ggcctatgc aggcattccat  
gaatgggtgt ttggccaggt catgtgcaag agcctactgg gcatctacac tattaacttc  
tacacgtcca tgcctatcct cactgcatc actgtggatc gtttcattgt agtggttaag  
gccaccaagg cctacaacca gcaagccaag aggatgacct ggggcaaggt caccagcttg  
ctcatctggg tgatatccct gctggtttcc ttgccccaaa ttatctatgg caatgtcttt

Accession	Gene	Protein	Species
348	SIV/HIV Receptor BONZO	NP_006555.1	Homo sapiens
6031			
349	Lysophosphatidic Acid Receptor Edg4	NM_004720	Homo sapiens
6204			

350	6204	Lysophosphat idic Acid Receptor Edg4	NP_004711.2	351	6213	C-C Chemokine Receptor 5	NM_000579	ctggtcaaga ctgtgtgcat catcctgggg gcgttcgtgg tctgtggag accaggccag gtggtactgc tctgggatg ttaggctgt gactcctgca atgtcctggc ttagaaaaa tacttctac tgttgccga gccaaactca ctggtcaatg ctgctgtgta ctcttgcga gatgtgaga tgcgcgcac ctccgcgc ctctctgct gcgctgct ccgccagtc accgcgagt ctgtccacta tacatctct gccacgggag gtgcagcac tgcacatg cttcccgaga acgcccaccc actgatggac tccacctt agctacctg aacttcagc gtacgcgga agcaacaat ccacagcccc tgatgacttg tgggtgctcc tggctcaacc caaccaacag gactgactg RVINGQCYNN ETIGFFYNNS GKELSSHWRP KDVVVALGL TVSVLVLLTN LLVIAIASN P Homo RRFHQPIYYL LGLNLAADLF AGVAYLFMF HTGPRTARLS LEGWFLRQGL LDTSLTASVA sapiens TLLAIAVERH RSVMAVQLHS RLPRGRVVM L IVGWMVAALG LGLPAHSHW CLCALDRCSR MAPLLRSYL AVVALSSLLV FLLMVAVYTR IFFYVRRVQ RMAEHVSHRP RYRETTLSLV KTVVILGAF VVCWTPGQVV LLLDGLGES CNVLAVERKYF LLLAEANSLV NAAVYSCRDA EMRRTFRRLL CCACLRQSTR ESHVYTSSAQ GGASTRIMLP ENGHPLMDST L cttcagatag attatatctg gactgaagga tctgcccac taccgtatctg gcatagtatt A Homo ctgtgtagt ggtgagcag agacacaaa caaataaatc cagtgaagaa agcccgtaaa sapiens taaaccttca gaccagagat ctattctcca gcttatttta agctcaactt aaaaagaaga actgttctct gattcttttc gcttcaata cacttaatag ttaactcca cctctctca aaagaaacag catttctac ttttatactg tctatatgat tgattgac agctcatctg gccagaagag ctgagacatc cgttcccta caagaaactt tcccgggtg gaacaagatg gattatcaag tgcgaagtcc aatctatgac atcaattatt atacatgga gccctgcaa aaaatcaatg tgaagcaaat cgcagccgc ctctgctc cgtctactc actggtgttc atctttggtt ttgtgggcaa catgctgtc atctcatcc tgataaactg caaaaggctg aagagcatga ctgacatcta cctgctcaac ctggccatct ctgacctgtt ttctctctt actgtccctt tctgggtc caatgctgc cccagtggtg actttggaaa tacaatgtgt caactcttga cagggtctta ttttataggc ttcttctctg gaactctctt catcatctc ctgacaaatc ataggtacct ggctgtgtc catgctgtg ttgctttaaa agccaggacg gtcacctttg ggtgtgtgac aagtgtgac acttgggtg gaaggtcttc tgctgtctc ccaggaaatca tctttaccag atctcaaaa gaaggtcttc attacacctg cagctctcat ttcccataca gtcagtatca attctggaag aatttccaga cattaaagat agtcatctg gggtgtgtcc tgcgtgtgt tgtcatgtt atctgtact cgggaatcct aaaaactctg cttcgtgtc gaaatgagaa gaagagcac aggtgtgga ggcttatctt caccatcatg attgtttatt ttcttctctg ggctccctac aacattgtcc ttctctgaa cacttccag gaattctttg gcctgaataa ttgcagtagc tctaacaggt tggaccacagc tatgcaggtg acagagactc ttgggtgac gcaactgtc cttagtctt tccaaaagc acattgcaa acgttctgc gagaagtcca gaaactacct cttagtctt tccaaaagc acattgcaa acgttctgc aaatgtgtt ctatttcca gaaagggct cccagcgag caagctcagt ttacaccga tccactggg agcaggaaat atctgtggg tttgtgacag gactcaagt ggtgtgtgac ccagtcagag ttgtgacat ggcttagttt tcatacacag cctgggctgg ggtgtgggtg ggagaggtct tttttaaaag gaagttactg ttatagagg tctaagattc atccattat ttggcatctg tttaaagtag attagatctt ttaagccat caattataga aagccaaatc
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352	6213	C-C Chemokine Receptor 5	NP_000570.1	<p> aaaaatatgtt gatgaaaaaat agcaaaccttt ttatctcccc ttacatgca tcaagttatt  gacaaactct ccttcactc cgaagttcc ttatgtatat ttaaagaaa gcctcagaga  attgctgatt ctgagttta gtgactgaa cagaaatacc aaaaattatt cagaaaatgta  caacttttta cctagtacaa ggcaacatat aggttgtaaa tgtgtttaa acaggtcttt  gtcttgctat gggagaaaa gacatgaata gtttagtaa agaatgaca ctttcatgt  gtgatttccc ctcaaggtta tggtaataa gtttactga cttagaacca ggcgagagac  ttgtggcctg ggagagctgg ggaagcttct taaatgagaa ggaattgag ttggatcatc  tattgctggc aaagacagaa gcctcactgc aagcactgca tgggcaagct tggctgtaga  aggagacaga gctggttggg aagacatggg gaggaaggac aaggttagat catgaagaac  cttgacggca ttgctccgct taagtcatga gctgacagg gagatcctgg ttggtgttgc  agaaggttta ctctgtggcc aaaggagggt caggaaggat ggcatttag ggaaggaga  ccaccaacag ccctcaggtc aggtgagga tggcctctgc taagctcaag gcgtgaggat  gggaaggagg gaggtattcg taaggatggg aaggaggag gtattcgtgc agcatatgag  gatgcagagt cagcagaact ggggtggatt tggttggaa gtgaggtca gagagggtc  agagagaatc cctagtcttc aagcagattg gagaaccct tgaagaaca tcaagcacag  aaggaggagg aggaggttta ggtcaagaag aagatggatt ggtgtaaaag gatgggtctg  gttgcagag cttgaacaca gtctaccca gctccaggc tgccttcac tgaatgcttc  tgacttcata gattccttc ccctccagc tgaatactg aggggtctcc aggaggagac  tagattttatg aatacacgag gtatgaggtc taggaacata cttcagctca cacatgagat  ctaggtgagg attgattacc tagtagtcat ttcatgggtt gttggaggga ttctatgagg  caaccacagg cagcatttag cacatactac acattcaata agcatcaaac tcttagttac  tcattcaggg atagcactga gcaagcatt gagcaaaagg gtcccatata ggtgagggaa  gcctgaaaaa ctaagatgct gctgcccag tgcacaaag gttaggtatc attttctgca  tttaaccgtc aataggcaaa ggggggaagg gacatatcca ttggaaata agctgccttg  agccttaaaa ccccaaaaag tacaatttac cagcctccgt atttcagact gaatgggggt  ggggggggcg ccttaggtac ttattccaga tgccttctcc agacaaacca gaagcaacag  aaaaaatcgt ctctccctcc ctttgaaatg aatatacccc ttagtgttg ggtatatcca  tttcaaaagg agagagagag gtttttttct gttctttctc atatgattgt gcacatactt  gagactgttt tgaatttggg gtagggctaa aaccatcata gtacaggtaa ggtgagggaa  tagtaagtgg tgagaactac tcagggaatg aaggtgtcag aataaaga ggtgctactg  actttctcag cctctgaata tgaacgtga gcatgtggc tgtcagcagg aagcaacgaa  gggaaatgct tttccttttg ctcttaagtt gtggagagtg caacagtagc ataggacctt  accctctggg ccaagtcaaa gacattctga catcttagta ttgcatatt cttatgtatg  tgaagttac aaattgcttg aaagaaaaa tgcacttaat aaaaaacacc ttcta  MDYQVSSPIY DINYTSEPC QKINVKQIAA RLLPPLYSLV FIFGVGNML VILLINCKR P Homo sapiens  LKSMTDIYLL NLAISDLFFL LTVPFWAHYA AAQWDFGNM COLLTLGYFI GFFSGIFFII  LLTIDRYLAV VHAUFALKAR TVTFGVVTSV ITWVAVFAS LPGIIFRSQ KEGLHYTCSS  HFPYSQYQFW KNFOTLKIVI LGLVLPLLVM VICYSGLIKT LLRCNEKKR HRAVRLIFTI  MIVYFLFWAP YNIVLLNLTQ QEFFGLNCS SSNRLDQAMQ VTETLGMTHC CINPIIYAFV  GEKFRNYLLV FFQKHAKRF CKCCSIFQOE APERASSVYT RSTGEQEISV GL </p>
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353	6363	Chemokine (C-C motif) Receptor- like 2 (CCR12)	NM_003965	<p>tctgtctgtg ggggaagtggg cacacgttaa cagaaatgtt tatttcagtc ttctgaataa A</p> <p>gggaattact ctggctaaaa ttagctctca gaaagggaaa gtgggctgt atgaatccag sapiens</p> <p>gtccagtttg ttgtttcttc caggataagg tagctgtcgg aggggaaaa catctcccat</p> <p>ttctccacag ggcagtcga agatgggcaa ttacacgtg gcaccagag atgaatatga</p> <p>tgctctcata gaagtgaaac tggagagcga tgaggcagag caatgtgaca agtatgacgc</p> <p>ccaggcactc tcagcccgagc tgggtgccat actctgctct cctgtgtttg tgatcgggtg</p> <p>cctggacaat ctctgtgttg tgcttatctt ggtaaaatat aaagactca aacgcgtgga</p> <p>aaatatctat ctctaaact tggcagtttc taactgtgt tcttgctta cctgcccc</p> <p>ctgggtctat gctggggggc atcccatgtg taaaattctc attggactgt acttcgtggg</p> <p>cctgtacagt gagacatttt tcaattgctt tctgactgtg caaaggtacc tagtggtttt</p> <p>gcacaaaggc aactttttct cagccaggag gaggtgtccc tgtggcatca ttacaaagt</p> <p>cctggcatgg gtaacagcca ttctggccac ttgacctgaa tactgtgttt ataaacctca</p> <p>gatggaagac cagaaataca agtgtgcatt tagcagaatt ccttctctgc cagctgatga</p> <p>gacattctgg aagcattttc tgactttaaa atgaacatt ccttctctgc tcttcccc</p> <p>atttattttt acatttctct atgtgcaaat gagaaaaa ctaaggttca gggagcagag</p> <p>gtatagcctt ttcaagcttg ttttggcat aatggtagtc ttcttctga tgtggggcgc</p> <p>ctacaattt gcatttttcc tgtccacttt caaagaacac ttctctctga gtgactgcaa</p> <p>gagcagctac aatctggaca aaagtgttca catcactaaa ctcatcgcca ccaccactg</p> <p>ctgcatcaac cctctctct atgcgtttct tgatgggaca tttagcaaat acctctgccg</p> <p>ctgtttccat ctgcgtagta acaccacct attccaccga agtgtaaaat agatccacc</p> <p>atcgagggaa gaacctgacc atccaccga agtgtaaaat agatccacc aaatgcaaga</p> <p>agaataaaca tggattttca tctttctgca ttatttctat taaattttct acacattgt</p> <p>atacaaaatc ggatacagga agaaaaggga gaggtgagct aacatttgc aagcactgaa</p> <p>tttgtctcag gcacctgca aggtctctta caaacgtgag ctctctgcc tctaccact</p> <p>tgctccatgt gtggatagga ctagtctcat ttctctgaga agaaaactaa ggcgcgggaa</p> <p>tttgtctaag atcacataac taggaagtgg cagaactgat tctccagccc tggtagcatt</p> <p>tgctcagagc ctacgcttgg tccagaacat caaactcaa acctgggga caaacgacat</p> <p>gaaataaatg tatttataaa catct</p>	Homo sapiens
354	6363	Chemokine (C-C motif) Receptor- like 2 (CCR12)	NP_003956.1	<p>LILVKYKGLK RVENIYLLNL AVSNLCFLT LPFWAHAGGD PMCKILIGLY FVGLYSETFF</p> <p>NCLLTQRYL VFLHKGNNFS ARRRVPCGII TSVLAWVTAI LATLPEYVYVY KPQMEDQKYK</p> <p>CAFSRTPFLP ADETFWKHFL TLKMNISVLV LPLFIFTFLY VQMRKTLRFR EQRYSLFKLV</p> <p>FAIMVFLIM WAPYNIAFFL STFKHFSLS DCKSSYNLDK SVHITKLIAT THCCINPLLY</p> <p>AFLDGTFSKY LCRCFHLRSN TPLQPRQSA QGTSREEPDH STEV</p>	Homo sapiens
355	6446	Pael Receptor (GPR37)	NM_005302	<p>atgcgagccc cgggcgcgt tctcgccgc atgtcgccg tactgtctt gctactgtctc A</p> <p>aagtgctctg cctcttctgc cctcggggtc gccctgcgt ccagaaaaga aacttgctg sapiens</p> <p>ggggagagct gtgcacctac agtgatccag gcgcgggca gggacgcctg gggaccggga</p> <p>aattctgcaa gagacttct ctagcccca gcacccagga gggagcaggg ggcagcggtt</p> <p>cttgccggac cctcctggga cctgcggcg gcccccggc gtgacccggc tgcagggcaga</p> <p>ggggcgggag cgtcggcagc cggaccccc ggacctcaa ccaggccacc tggccccctgg</p> <p>aggtggaaaag gtgctcgggg tcaggagcct tctgaaact tggggagagg gaacccccag</p>	Homo sapiens

356	6446	Pael Receptor (GPR37)	NP_005293.1	<p>gcccaccagc tcttccttca gatctcagag gaggaagaga aggggtccag aggcgtggc  atttcgggc gtagccagga gcagagtgtg aagacagtcc ccggagccag cgatctttt  tactggccaa ggagagccgg gaaactccag ggttcccacc acaagccctt gtccaagagc  gccaatggac tggcggggca cgaagggtgg acaattgcac tcccgggccc ggcgctggc  cagaatggat ccttgggtga aggaatccat ggcctggggg gtcccggccc gggaacacagc  acgaaccggc gtgtgagact gaagaacccc ttctaccgcc tgaccaggga gtccatagg  gcctacggcg tcatgtgtct gtcgtgggtg atcttcggga ccggcatcat tggcaacctg  gcggtgatgt gcactgtgtg ccacaactac tacatgcgga gcattccaa ctccctctg  gccaaacctg ccttctggga ctttctcacc atcttcttct gcttccgctt ggtcatcttc  cacgagctga ccaagaagtg gctgctggag gacttctcct gcaagatcgt gccctatata  gaggtcgctt ccttgggagt caccaccttc accttatgtg ctctgtgcat agaccgcttc  cgtgctgcca ccaacgtaca gatgtactac gaaatgatcg aaaactgttc ctcaacaact  gccaaacctg ctgttatatg ggtggagctt ctattgttag cacttcaga agttgttctc  cgccagctga gcaaggagga ttgggggttt agtggccgag ctccggcaga aagtgccatt  attaagatct cctctgattt accagacacc atctatgttc tagccctcac ctacgacagt  gcgagactgt ggtgtattt tggctgttac tttgtttgc ccacgctttt caccatcacc  tgctctctag tgactgcgag gaaaatccgc aaagcagaga aagcctgtac ccgagggaat  aaacggcaga ttcaactaga ggtcagatg aactgtacag tagtggcact gaccatttta  tatggatttt gcattattcc tgaataatc tgcaacattg ttactgccta catggctaca  gggtttcac agcagacaaat ggacctctt aatatactca gccagttcct ttgttcttt  aagtcctgtg tcacctcagt cctcctttt tgtctgtgca aaccttcag tcgggacctc  atggagtgtg gctgctgttg ctgtgaggaa tgcattcaga agtcttcaac ggtgaccagt  gatgacaatg acaacgagta caccacggaa ctgaaactct cgcctttcag taccatacgc  cgtgaaatgt ccacttttgc ttctgtcgga actcattgct ga</p>	Homo sapiens
357	6536	Putative Neurotransmitter Receptor (PNR)	NM_003967	<p>atgagagctg tcttcatcca aggtgctgaa gagcacccctg cggcattctg ctaccagggtg A  aatgggtctt gccccaggac agtacatact ctgggcaccc agttggtcat ctacctgacc  tgtgcagcag gcatgctgat tatcgtgcta gggaaatgtat ttgtggcatt tgtgtgtcc  tacttcaaa gctgtcacac gccaccacac ttctctgtgc tctccctggc cctggctgac  atgtttctgg gctgtgtgtg gctgccccctc agcacattc gctcagtggga gagctgctg  ttcttcgggg acttctctctg ccgctgctgac acctacctg acacctctt ctgcctcacc</p>	Homo sapiens

358	6536	Putative Neurotransmitter Receptor (PNR)	NP_003958.1	<p> tccatcttcc atctctgttt catttccatt gaccgccact gtgccatctg tgacccccctg  ctctatccct ccaagttcac agtgagggtg gctctcaggt acatctggc aggatggggg  gtgcccgcag catacacttc gttattccct tacacagatg tggtagagac aaggctcagc  cagtggtcgg aagagatgcc ttgtgtgggc agtgccagc ttgtgtctca taaatttgg  ggctgggttaa acttcccttt gttctttgtc cctgctcca ttatgatcag cttgtatgtg  aagatctttg tggttgctac cagacaggtc cagcagatta ccacattgag caaaagcctg  gctggggctg ccaagcatga gagaaaagct gccaaagccc tgggcatigt tgtgggcata  tacctctgt gctggctgcc cttaccata gacacagatg tegacagcct ccttcacttt  atcacacccc cactggcttt tgacatcttt atctggtttg cttacttcaa ctcagcctgc  aaccocatca tctatgtctt ttcctaccag tggtttcgga aggcactgaa actcacactg  agccagaagg tcttctcacc gcagacagc actgttgatt tgtaccaaga atga  MRAVFIOGAE EHPAFCYQV NGSCPRTVHT LGIQLVIYLT CAAGMLIIVL GNVFAFVS P  YFKALHTPTN FLLSLALAD MELGLLVLP STIRSVESCW FFGDFLCRLH TYLDTLFLCT  SIFHLCFISI DRHCAICDPL LYPSTFTVRV ALRYILAGWG VPAAYTSLFL YTDVVEITRLS  QWLEEMPCVG SCQLLNKFW GWLNFPLFEV PCLIMISLYV KIFVATRQA QQITTLKSLS  AGAAKHERKA AKTLGIWVG I YLLCWLPFTI DTMVDSLHFE ITPPLVFDIF IWFAYFNSAC  NP1IYVFSYQ WFRKALKLTL SQRVFSQTR TVDLYQE </p>	Homo sapiens
359	6777	G Protein- Coupled Receptor TM7SF1	NM_003272	<p> cggcgcatg cgcggagacc cccgcggggg cggcggggc cgtgagcccc gatgagggcc A  gagcgtcccc ggcgcgcgg cagcgcccc gcccagatgg agaccccgcc gtgggaccca  gcccgaacg actcgtgcc gccacgctg acccggccg tgcctcccta cgtgaagctt  ggcctcaccg tgcgtacac cgtgttctac gcgctgctct tgcgttcat ctacgtgcag  ctctggctg tgcgcgta cgcacaaag cgcctcagct accagagcgt ctctctctt  ctctgctct tctggcctc cctgcgacc gctctctct cctctactt caaagacttc  gtggcgcca attcgtcag cccctcgtc tctggctgc tctactgctt ccctgtgtgc  ctgcagttt tcacctcac gctgatgaac ttgtacttca cgcaggtgat ttcaaaagcc  aagtcaaaat attctccaga attactcaaa taccggttgc cctctacct ggctccctc  ttcatcagcc ttgttttct cgtgtggaat ttaacctgtg ctgtgctggt aaagacggga  aattgggaga ggaaggttat cgtctctgt cagatggcca ttaatgacac gctcttctg  ctgtgtccg tctctctc catctctc tcaaaaatct ctaagatgtc cttagccac  atttacttgg agtccaaagg cctctcgtg tgcgaagtga cgtccatcgg tgcaccgtg  atactgctt acacctctg ggctgctac aacctgttca tctgtcatt tctcagaac  aagagcgtcc attccttga ttatgactgg tacaatgtat cagaccaggc agatttgaag  aatcagctgg gagatgctg atactatta ttggagtg tttatttgt ttgggaactc  ttacctacca ccttagtgt ttattcttc cgaagttaga atctacaaa ggaccttacc  aaccctgga tggccccag ccatgattc agtcccagat cttatttctt tgacaacctt  cgaagatatg acagtatga tgacctgcc tggaaacattg cccctcaggc acttcaggga  ggttttgctc cagattacta tgattggga caacaaacta acagcttctt ggcacaaaga  ggaaacttgc aagactcaac ttgtgatcct gacaaaccaa gcttgggta gcatcagtta  acagttttat ggacgattcc tcagatgaaa agcttcagaa agcatagtg acagctgaat  ttttaggcca ctttctcta agaaatagaa attgattttt attgtttaca ggtttccaat  ggccccatag gaataagcaa taatgtagac tgataaaccc ttattttagt actaaagagg </p>	Homo sapiens

360	6777	G Protein- Coupled Receptor TM7SF1	NP_003263.1	MRPERPRRG SAPGPMETPP YVQLWLVLRY RHKRLSYQSV PVCLQFFTLT LMNLYFTQVI FKAKSKYSPE LKYLRLPLYL ASLFLSLVFL LVNLTCAVLV KTGNERKVI VSVRVAINDT LFVLCVAVSL ICLYKISKMS LANIYLESKG SSVQCQTAIG VTVILLYTSR ACYNLFILSF SQNKSVHSFD YDWNVNSDQA DLKNQLGDAG YVLFVGVLFV WELLPITLVV YFFRVRNPTK DLTNPGMVPS HGFSRPSYFF DNPRRYDSDD DLAWNIAPOG LQGGFAPDYY DWGQOTNSFL AQAGTLQDST LDPDKPSLG	gagccttgct atttcagtggt gtataaattta aacttttttaa agaaaatctgt tacttttata aagatgtatt ttgtataact taaataataa tgctaaagta tactagggtt tttttttctt gagaatgta ctgcaatcat gttgtagttt gcacagactt ttatgcataa ttacttttaa aaatatagaa tatagtgtct aatagttttt taaagctttt ggactaaagt attccacaaa tcttacctct ttaggtcact gatgtcact cagattctga ttgccacatt gtagactcc taaaatacag ttgacaactt agccaattgc aactccagt ttgataatta aatgaaaaatg gtaagcagc agactgtaag gtcttttagag attttttttt aaggttcagg ccgtagggtc ctcaaggaat ctcttaagt ttgcccaga actggtactt cctttcagta ggcggtaat gtataacat taatgataag ttgataacat taaaatgta gctgacttat cctattaaac ctcctctgct atgttcac	Homo sapiens
361	6853	Puriner- gic Receptor P2Y11	NM_002566	atggatcag gtgcaagtc ctgcccctgc aactcttgg cagctgcccga cgacaaactc A agtgggttc aggggactt cctgtggccc atactgttg ttgagttcct ggtggccgtg gccagcaatg gctgggccc gtaccgcttc agcatccga agcagcggcc atggcacccc gctgtggtct tctgttcca gctggcagtc agcagctgc tctgctctt gacgtgccc ccgtggccg cctacctta tcccccaag cactggcgt atggggaggc cgctgccc ctggagcgt tctcttccac ctgcaacctg ctgggcagc tcatcttcat cacctgcatc agcctcaacc gctacctggg catcgtgcac ccttctctcg cccgaagcca cctgcgaccc aagcacgctt gggcgtgag cgtgcccggc tgggtcctgg cgcctctgct ggccatgccc acactcagct tctccacct gaagaggccg cagcaggggg cgggcaactg cagcgtggcc aggcccgagg cctgcatcaa gtgtctgggg acagcagacc acgggctggc ggcctacaga gcgtatagcc tgggtcgtgc ggggttggc tgcggcctgc cgtgctgct cagcctggca gcctacggcg cctcgggcg ggcctgtgta cgcagcccag gcatgactgt ggcagagaag ctgcgtgtgg cagcgttgggt ggcagtggtt gtggccctct acgccagctc ctatgtgcc taccacatca tgcgggtgct caactggat gctcggcggc gctggagcac ccgtgccc agctttgcag acatagccca gcccacagca gccctggagc tggggcccta cgtgggctac caggtgatgc ggggcctcat gcccctggc tctgtgtcc accttact ctacatggcc gcagtgccca gctgggctg ctgctgccga cactgcccg gctacagga cagctgggaac ccagaggacg ccaagagcac tggccaagcc ctgcccctca atgccacagc cgccccctaaa ccgtcagagc cccagtcctc tgaactgagc caatga	atggatcag gtgcaagtc ctgcccctgc aactcttgg cagctgcccga cgacaaactc A agtgggttc aggggactt cctgtggccc atactgttg ttgagttcct ggtggccgtg gccagcaatg gctgggccc gtaccgcttc agcatccga agcagcggcc atggcacccc gctgtggtct tctgttcca gctggcagtc agcagctgc tctgctctt gacgtgccc ccgtggccg cctacctta tcccccaag cactggcgt atggggaggc cgctgccc ctggagcgt tctcttccac ctgcaacctg ctgggcagc tcatcttcat cacctgcatc agcctcaacc gctacctggg catcgtgcac ccttctctcg cccgaagcca cctgcgaccc aagcacgctt gggcgtgag cgtgcccggc tgggtcctgg cgcctctgct ggccatgccc acactcagct tctccacct gaagaggccg cagcaggggg cgggcaactg cagcgtggcc aggcccgagg cctgcatcaa gtgtctgggg acagcagacc acgggctggc ggcctacaga gcgtatagcc tgggtcgtgc ggggttggc tgcggcctgc cgtgctgct cagcctggca gcctacggcg cctcgggcg ggcctgtgta cgcagcccag gcatgactgt ggcagagaag ctgcgtgtgg cagcgttgggt ggcagtggtt gtggccctct acgccagctc ctatgtgcc taccacatca tgcgggtgct caactggat gctcggcggc gctggagcac ccgtgccc agctttgcag acatagccca gcccacagca gccctggagc tggggcccta cgtgggctac caggtgatgc ggggcctcat gcccctggc tctgtgtcc accttact ctacatggcc gcagtgccca gctgggctg ctgctgccga cactgcccg gctacagga cagctgggaac ccagaggacg ccaagagcac tggccaagcc ctgcccctca atgccacagc cgccccctaaa ccgtcagagc cccagtcctc tgaactgagc caatga	Homo sapiens
362	6853	Puriner- gic Receptor P2Y11	NP_002557.1	MDRGAKSCPA NFLAAADDKL SGFQGDFLWP ILVVEFLVAV ASNGLALYRF SIRQRPWHP P AVFVSQVLAV SDLLCALTLPLAALYLPK HWRYGEAACR LERFLFTCNL LGSVIFTICI SLNRYLGIVH PFEARHLRP KHAWAVSAAG WVLAALLAMP TISFSLKRP QQGAGNCSVA RPEACIKCLG TADHGLAAYR AYSIVLAGLG CGLPLILLTLA AFGALGRAVL RSPGMTVAEK LRVAALVASG VALYASSYVP YHIMRVLNVD ARRWSTRCF SFADIAQATA ALELGPYVGY	MDRGAKSCPA NFLAAADDKL SGFQGDFLWP ILVVEFLVAV ASNGLALYRF SIRQRPWHP P AVFVSQVLAV SDLLCALTLPLAALYLPK HWRYGEAACR LERFLFTCNL LGSVIFTICI SLNRYLGIVH PFEARHLRP KHAWAVSAAG WVLAALLAMP TISFSLKRP QQGAGNCSVA RPEACIKCLG TADHGLAAYR AYSIVLAGLG CGLPLILLTLA AFGALGRAVL RSPGMTVAEK LRVAALVASG VALYASSYVP YHIMRVLNVD ARRWSTRCF SFADIAQATA ALELGPYVGY	Homo sapiens

363	6921	G Protein- Coupled Receptor GPR39	NM_001508	QVMRGLMPLA FCVHPLLYMA AVPSLGCCCR HCPGYRDSWN PEDAKSTGQA LPLNATAAPK PSEPQSRELS Q	Homo sapiens
364	6921	G Protein- Coupled Receptor GPR39	NP_001499.1	atggcttcac ccagcctccc gggcagtgac tgctccaaa tcattgatca cagtcattgc A cccgagtttg aggtggccac ctggatcaaa atcaccttta ttctgggtga cctgatcatc ttcgtgatgt gctctctggg gaacagcgcc accattcttg tccaccaggt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacttggtga gtttggcttg ctcgacatc ttggtgttcc teatcgcat gcccatggag ttctacagca tcatctgaa tcccctgacc acgtccagct acacccctgc ctgcaagctg cacacttcc tcttcagggc ctgcagctac gtaacgtgc tgacgtgct gacactcagc tttagcgct acatcgccat ctgtcacccc ttcagggtaca aggtgtgtc gggacctgc caggtgaagc tgcgtattgg cttegtctgg gtcacctcg cctgtgtgc actgacctg ctgtttgcca tgggtactga gtacccccctg gtgaacgtgc ccagccaccg ggtctcact tgaacacct ccagccctg gacctgttc cagcccgaga cctccaatat gtccatctgt accaacctc cagccctg gacctgttc cagtcacaga tcttcggcg cttcgtgtc tacctctgg tctgtcttc cgtagccttc atgtgctgga acatgatgca ggtgctcatg aaaagccaga agggctcgt ggcgggggc acggggctc cgcagctgag gaagtcgag agcgaagaga gcagaccgc caggaggcag accatcatc tctgaggtc gattgtgtg acattggccg tatgtggat gcccaaccag attcggagga tcatggctgc ggcacaccc aagcacgact ggacgaggtc ctacttcgg gcgtacatga tctcctccc cttctcggag acgttttct acctcagctc ggtcatcaac cgtctcctgt acacgtgtc ctgcagcag ttctggcggg tttcgtgca ggtcgtgtc tgccgctgt cgtgcagca cgcacacac gagaagcgc tgccgtaca tgcgactcc accacgaca gcgccgctt tgtgcagcg ccgtgtctc tgcgtcccc gcgccagtc tctgcaagga gaactgaga gatttctta agcattttc agagcgagc cgagccccag tctaaagccc agtcattgag tctcagtgca ctagagccca actcaggcgc gaaaccagc aattctgtc cagagaatgg ttttcaggag catgaattt ga MASPSLPGSD CSQIIDSHV PEFVATWIK ITLILVYLI FVMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HMVSLACSDI LVFLIGPME FYSIIWNPLT TSSYTLCKL HTFLFEACSY ATLLHVLTL FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNSIC TNLSSRWTFV QSSIFGAFV YLVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPQLRKSE SEESRTARRQ TIFLRLIV TLAVCWMPNQ IRRIMAAAKP KHDWTRSYFR AYMLLPFSE TFFYLSSVIN PLYTVSSQQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLFASRRQS SARTEKIFL STFQSEAEPO SKSQSLLES LEPNSGAKPA NSAAENGFEQ HEV ggacaggtgc cccggagct tcccgtcgc gaagaccag acggctgcag gacccgggc A agcctcgggg tcagcgccac catgaagtc tcgggtgccc caggggccc gaaacgcagc cagggcggg gcgggggag ctggacccc gagcggtca tctgtcccc gctcttcgcg ctcatcttc cgtggggac cgtggggac cgtggggac accttaac tggcggtgct gctgcgggc ggccagggcg tcagcactac caactgttc atcttaac ccttgagcgg cagactgtgt ttcatcctgt gctcgtgccc cttccagccc accatctaca ccttgagcgg ctgggtgttc ggctcgtgc tgtgcaaggc ggtgcacttc cctcatcttc tcaccatgca cgccagcagc ttcacgctg ccgccgtct cctggacagg tatctggcca tccgtaccc gctgcactcc	Homo sapiens
365	7221	Galanin Receptor GalR2	NM_003857	ggacaggtgc cccggagct tcccgtcgc gaagaccag acggctgcag gacccgggc A agcctcgggg tcagcgccac catgaagtc tcgggtgccc caggggccc gaaacgcagc cagggcggg gcgggggag ctggacccc gagcggtca tctgtcccc gctcttcgcg ctcatcttc cgtggggac cgtggggac cgtggggac accttaac tggcggtgct gctgcgggc ggccagggcg tcagcactac caactgttc atcttaac ccttgagcgg cagactgtgt ttcatcctgt gctcgtgccc cttccagccc accatctaca ccttgagcgg ctgggtgttc ggctcgtgc tgtgcaaggc ggtgcacttc cctcatcttc tcaccatgca cgccagcagc ttcacgctg ccgccgtct cctggacagg tatctggcca tccgtaccc gctgcactcc	Homo sapiens

366	7221	Galanin Receptor GalR2	NP_003848.1	<p>cgagagctgc gacgcctcg aaacgcgctg gcagccatcg ggctcatctg gggcgtgctg  ctgtcttct cgggccccta cctgagctac taccgccagt cgcagctggc caacctgacc  gtgtgccatc ccgcgtggag cgcctctgc cgcgcgcga tggacatctg cactctctg  ttcagctacc tgttctctgt gctgttctc ggtggtacct acgcgcgcac cttgcgtac  ctctggcgcg ccgtcgaccc ggtggcgcg ggctggggtg cccgcgcgcg caagcgcaag  gtgacacgca tgatctctat cgtggcgcg cttctctgc tctgctggtat gcccaccac  gcgtcatcc tctgctgtg gttcgccag ttcccgctca cgcgcgcac ttatgcgtt  cgcctctct cgcacctgtt cctctacgc aactctgc tcaacccat cgtttacgcg  ctggtctca agcacttccg caaaggcttc cgcagatct cgcgcgcct gctgggcccgt  gccccaggc gagctcggg ccgtgtgtg cgtgcgcgc ggggcaccca cagtgcagc  gtgttgagc gcgagtcag cgcctgttg cactgagcg aggcggcgg ggcctctgt  ccctgcccc gcgcttccca gccatgcat ctcgagccct gtcctggccc gtcctggcag  ggcccaagg caggcgacag catcctgac gttgatgtg cctgaaagca cttagcggc  gcgctggat gtcacagat tggagtcatt gttgggggac cgtgggccc  MNVSGCPGAG NASQAGGGG WHPEAVIVPL LFALIFLVGT VGNTLVLAFL LRGQAVSTT P  NLFILNLGVA DLCLFILCCVP FOATYITLDG WVFGLLCKA VHFLIFLTMH ASFTLAASV  LDRLAIRYP LHSRELTPR NALAAIGLIW GLSLFSGPY LSYYRQSLA NLTVCHPAWS  APRRAMDIC TFVFSYLLPV LVLGLTYART LRYLWRAVDP VAAGSGARRA KRKVTRMLLI  VAALFCLCWM PHHALILCVW FGQFLTRAT YALRILSHLV SYANSCWPI VYALVSKHFR  KGFRTICAGL IGRAPGRASG RVCAARGTH SGVLERESS DLLHMEAAAG ALRCPGASQ  PCILEPCGP SWQPKAGDS ILTVDA</p>	Homo sapiens
367	7246	Orexin Receptor 1	NM_001525	<p>ctctccctca ggaagtttga gctgagacc cgaagagacc tgggtgcaag cctccaggca A  cctgaaagg agtggctga ggtctggccc agctccctc ctctccctct gttagacctg  ggatgcccc ctgtctgac cgcctctgc cctcctgag cctcagccac ccagggggc  cagatggggg tccccctg cagcagagag ccgtccctg tgcctccaga ctatgaagat  gagttctcc gctatctgt gctgattat ctgtaccca aacagatga gtgggtcctc  atgcagcct atgtgctgt gttcgtctg gccctggtg gcaacacgt ggtcgtcctg  gccgtgtggc ggaaccacca catgagaca gtcaccaact acttcattgt caacctgtcc  ctggctgacg ttctgtgac tgcctctgc ctgcccggca gcctgctgtt ggacatcact  gagtcctggc tgttcggcca tgcctctgc aagtcctc cctatctaca ggtgtgtcc  gtgtcagtgg cagtgtaac tctcagcttc atgccttg accgctggtg tgcctctgc  caccactat tgttcaagag cacagcccg cgggcccgtg gctccatcct gggcctctgg  gctgtgtgc tggccatcat ggtgcccag cgtgcagtea tggaaatgcag cagtgtgctg  cctgagctag ccaaccgcac acggtcttc tcagtctgt atgaacgtg ggcagatgac  ctctatccca agatctacca cagtgtctt tttattgta cctacctggc ccaactgggc  ctcatggcca tggcctattt ccagatattc cgaagctct ggggcgcga gateccccgc  accacctcag cactgtgtcg gaactggaag cgcctccag accagctggg ggacctggag  caggccctga gtggagagc ccagccccg ggcgcgcct tctggctga agtgaagcag  atgctgtcac ggaggaagac agccaagatg gctggtgtg tctgctgtt cttgcctc  tgctacctgc ccatcagcgt cctcaatgtc cttaaagagg tgttcgggat gttccgcca  gccagtgacc gcgaagctgt ctacgcctg ttcaccttct cccactggtt ggtgtacgcc</p>	Homo sapiens

368	7246	Orexin Receptor 1	NP_001516.1	MEPSATPGAQ MGVPFGSREP SPVPPDYDE FLRYLWRDYL YPKQYEWVLI AAYVAVFVVA P LVGNTLVCLA VWRNHMRTV TNYFIVNLSL ADVLVTALCL PASLLVDITE SWLFHGHALCK VIPYLOAVSV SVAVLTLSEI ALDRWYAICH PLLFKSTARR ARGSLILGIWA VSLAIMVPOA AVMECSVLP ELANRTRLES VCDERWADDL YPKIYHSCFF IVTYLAPLGL MAMAYFQIFR KLMGRQIPGT TSALVRNWK RPSDQLGDLEQ GLSGEPQPRG RAFLAEVKQM RARRKTAKML MVLLLVFALC YLPISVLNVL KRVFGMFRQA SDREAVYACF TFSHWLVYAN SAANPIIYNF LSGKFRQEFK AAFSCCLPGL GPCGSLKAPS PRSSASHKSL SLQSRCSISK ISEHVVLTSV TTVLP	Homo sapiens
369	7247	Orexin Receptor 2	NM_001526	gggggggggg taattgagct tcagctgagc cggaagctagc ttctctctcc tgggtgctatt A gctgcagcct ccagtgccgg gtccttagtt cctcagctgc ctatctctcc ggtgcaacat cgctgtataa gacagcaag ccaccgcaga agttgcccg cagaagactc cggaggcatt ggctcagtaa cttttcacgt cttttctgc tcgggagccc cttctagcct ctccgcgcag cctttccac cgcaaatcac cagtgtctcat ggggcaggcg gagaggagct tgcagcattg agcggaaccg gacttgagcc cgtgatgtcc ggcaccaaatt tggaggagct cccctctgt cgcaactggt catctgtctc ggagctgaat gaaactcaag agcctctttt aaacccacc gactatgacg acgaggaatt cctgcggtac ctgtggaggg aatacctgca ccgaaaagaa tatgagtggg tcctgatcgc cgggtacatc atcgtgttcg tcgtggtctc cattgggaac gtcctgggtt gtgtggcagt gtggaagaac caccacatga ggacggtaac caactacttc atagtcaatc ttctctggc tgatgtgtc gtgacctca cctgcctcc agccacactg gtcgtggata tcaatgagac ctggtttttt ggacagtccc ttggcaagt gattccttat ctacagaccg tgcgtgtgc tgtgtctgc ctacacatga gctgtatcgc cttggatcgg tggatgcaa tctgtcacc ttgtatgttt aagagcacag caaagcgggc ccgtaacagc attgtcatca tctgattgt cctctgcatt ataattgatt ctcaggccat cgtcatggag tgacgaccg tgttccagg cttagccaat aaacccacc tctttacggg gtgtgatgag cgctggggtg gtgaaattta tcccaagatg taccacatct gtttctttct ggtgacatac atggcaccac tgtgtctcat ggtgttggtt tatctgcaa tttctgcaa actctggtgt cgacagatcc ctggaacatc atctgtagt cagagaaaat ggaagccct gcagcctgtt tcacagcctc gagggccagg acagccaacg agtccccga tgaagcctgt ggcggctgaa ataaagcaga tccgagccag aaggaaaaca gcccgatgt tgaatgtgt gcttttggtg tttgcaattt gctatctacc aattagcatc ctcaatgtgc taaagagagt atttgggatg tttgcccata ctgaagacag agagactgt tatgcctggt ttacctttc acactggctt gtatatgcca atagtgtgc gaatccaatt attataatt ttctcagtgg aaaattcga gaggaattta aagctgcgtt ttctgtgtgt tgcctggag ttccaccatc ccaggagat cggctacca ggggacgaac tagcacagag agccggaagt ccttgaccac tcaaatcagc	Homo sapiens

370	7247	Orexin Receptor 2	NP_001517.1	<p> aactttgata acatatcaaa actttctgag caagttgtgc tcaactagcat aagcacactc  ccagcagcca atggagcagg accacttcaa aactggtaga atatttattc atatgacaag  gatacctgag taaaactatc ctttttaaaa cagaaatttt attatcctat  gatgtgaagc taaaattact tttggatctt tttttttttt aatctattgc tctttggaaa  taaaaaaaaaa gtcagtttaa aatgaaaaaa aaaaaaaaaa aaa  MSGTKLEDSP PCRNWSSASE LNETQEPFLN PTDYDEEFL RYLWREYLHP KEYEWVLIAG P  YIIVFWALI GNVLCVAVW KNHMRVTN YFIVNLSLAD VLVITITCLPA TLVVDITETW  FFQSLSCKVI PYLQTVSVSV SVLTLSIAL DRWYAICHLPL MFKSTAKRAR NSIVIWIIVS  CLIMIPQAIIV MECSTVFPLG ANKTTLFTVC DERWGEIYP KMYHICFFLV TYMAPLCLMV  LAYLIQIFRKL WCRQIPGTSS VVQRKWKPLQ PVSQPRGPQG PTKSRMSAVA AEIKQIRARR  KTARMLMVL LVFAICYLPI SILNVLKRVF GMFAHTEDRE TVYAWFTFSH WLVIYANSAAN  PIIYNFLSGK FREEFKAAFS CCCLGVHHRQ EDRLTRGRTS TESRKSLLTQ ISNFDNISKL  SEQVVLTSIS TLPANGAGP LQNW  ccagctgata ttcagccca cagcaatgga gccacatgac tctctccaca tggactctga A  gttccgatac actctcttcc cgattgttta cagcatcatc tttgtgctcg gggatcattgc  taatggctac gtgctgtggg tctttgccc cctgtaccct tgcaagaat tcaatgagat  aaagatcttc atgtggaacc tcaccatggc ggacatgctc tctttgatca ccttgccact  ttggattgtc tactaccaaa accagggcaa ctggatactc cccaaattcc tgtgcaacgt  ggctggctgc cttttcttca tcaaacacta ctgctctgtg gccttccctgg gcgtcatcac  ttataaccgc ttccaggcag taactcgcc catcaagact gctcaggcca acacccgcaa  gcgtggcatc tctttgtcct tggctacatg ggtggccatt ggtggagctg catcctactt  cctcatcctg gactctacca acacagtgc ccagatgctt ggtcaggga acgtcactcg  ctgctttgag cattaagaga agggcagcgt gccagtcctc atcatccaca tcttcatcgt  gttcagcttc ttcctgtgtc tctcatcat cctctctgc aacctgtca tcatccgtac  cttgctcatg cagccggtgc agcagcagcg caacgtgaa gtcaagcgcc gggcgctgtg  gatgggtgc acggtcttgg cgggtttcat catctgcttc gtgcccacc acgtgggtga  gctgccctgg acccttgcgt agctgggctt ccaggacagc aaattccacc aggccattaa  tgatgcacat caggtcaccc tctgcctcct tagcaccaac tgtgtcttag accctgttat  ctactgtttc ctcaccaaga agttcccgaa gcacctcacc gaaagtctt acagcatgcg  cagtagccgg aaatgctccc gggccaccac ggatacgggt actgaagtgg ttgtgccatt  caaccagatc cctggcaatt cctcaaaaaa ttagtccttg cttc  MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLWVF ARLYPCKKFN EIKIFMVNLT P  MADMLFLITL PLWIVYQNG GNWILPKFLC NVAGCLFFIN TYCSVAFLGV ITYNRFQAVT  RPIKTAQANT RKRGISLSLV IWAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYEGK  SVPVLIHIF IVFSFVLVFL IILFCNLVII RTLLMQPVQO QRNAEVKRRR LMWVCTVLAV  FIICFVPHV VOLPWTLAEL GFQDSKFHOA INDAHQVTLCLLSTNCVLDLP VIYCFLLTKKF  RKHLTEKFYS MRSRKCRA TTDVTVEVV PFNQPNSL KN  tg9ggg9cgtc cctcttgcgt cccgc9c9gc t9tcaagctg t9ttctagcg gccgagggac A  cgaggggggc taagaaaggg ggc9cc9cgc cagtcagagc caaaaaggcg ctgcggaacg  gggtcc9cgt cgccagt9ct gaggcagagc gtcggagcca caagtgaggg cgtggggaagc  aggacc9cgc acggg9cgtc tggcagggcg cggg9cgcag ggccaggctg ctgggg9cgc </p>	Homo sapiens
371	8436	Platelet- Activating Factor Receptor	NM_000952	<p> ccagctgata ttcagccca cagcaatgga gccacatgac tctctccaca tggactctga A  gttccgatac actctcttcc cgattgttta cagcatcatc tttgtgctcg gggatcattgc  taatggctac gtgctgtggg tctttgccc cctgtaccct tgcaagaat tcaatgagat  aaagatcttc atgtggaacc tcaccatggc ggacatgctc tctttgatca ccttgccact  ttggattgtc tactaccaaa accagggcaa ctggatactc cccaaattcc tgtgcaacgt  ggctggctgc cttttcttca tcaaacacta ctgctctgtg gccttccctgg gcgtcatcac  ttataaccgc ttccaggcag taactcgcc catcaagact gctcaggcca acacccgcaa  gcgtggcatc tctttgtcct tggctacatg ggtggccatt ggtggagctg catcctactt  cctcatcctg gactctacca acacagtgc ccagatgctt ggtcaggga acgtcactcg  ctgctttgag cattaagaga agggcagcgt gccagtcctc atcatccaca tcttcatcgt  gttcagcttc ttcctgtgtc tctcatcat cctctctgc aacctgtca tcatccgtac  cttgctcatg cagccggtgc agcagcagcg caacgtgaa gtcaagcgcc gggcgctgtg  gatgggtgc acggtcttgg cgggtttcat catctgcttc gtgcccacc acgtgggtga  gctgccctgg acccttgcgt agctgggctt ccaggacagc aaattccacc aggccattaa  tgatgcacat caggtcaccc tctgcctcct tagcaccaac tgtgtcttag accctgttat  ctactgtttc ctcaccaaga agttcccgaa gcacctcacc gaaagtctt acagcatgcg  cagtagccgg aaatgctccc gggccaccac ggatacgggt actgaagtgg ttgtgccatt  caaccagatc cctggcaatt cctcaaaaaa ttagtccttg cttc  MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLWVF ARLYPCKKFN EIKIFMVNLT P  MADMLFLITL PLWIVYQNG GNWILPKFLC NVAGCLFFIN TYCSVAFLGV ITYNRFQAVT  RPIKTAQANT RKRGISLSLV IWAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYEGK  SVPVLIHIF IVFSFVLVFL IILFCNLVII RTLLMQPVQO QRNAEVKRRR LMWVCTVLAV  FIICFVPHV VOLPWTLAEL GFQDSKFHOA INDAHQVTLCLLSTNCVLDLP VIYCFLLTKKF  RKHLTEKFYS MRSRKCRA TTDVTVEVV PFNQPNSL KN  tg9ggg9cgtc cctcttgcgt cccgc9c9gc t9tcaagctg t9ttctagcg gccgagggac A  cgaggggggc taagaaaggg ggc9cc9cgc cagtcagagc caaaaaggcg ctgcggaacg  gggtcc9cgt cgccagt9ct gaggcagagc gtcggagcca caagtgaggg cgtggggaagc  aggacc9cgc acggg9cgtc tggcagggcg cggg9cgcag ggccaggctg ctgggg9cgc </p>	Homo sapiens
372	8436	Platelet- Activating Factor Receptor	NP_000943.1	<p> ccagctgata ttcagccca cagcaatgga gccacatgac tctctccaca tggactctga A  gttccgatac actctcttcc cgattgttta cagcatcatc tttgtgctcg gggatcattgc  taatggctac gtgctgtggg tctttgccc cctgtaccct tgcaagaat tcaatgagat  aaagatcttc atgtggaacc tcaccatggc ggacatgctc tctttgatca ccttgccact  ttggattgtc tactaccaaa accagggcaa ctggatactc cccaaattcc tgtgcaacgt  ggctggctgc cttttcttca tcaaacacta ctgctctgtg gccttccctgg gcgtcatcac  ttataaccgc ttccaggcag taactcgcc catcaagact gctcaggcca acacccgcaa  gcgtggcatc tctttgtcct tggctacatg ggtggccatt ggtggagctg catcctactt  cctcatcctg gactctacca acacagtgc ccagatgctt ggtcaggga acgtcactcg  ctgctttgag cattaagaga agggcagcgt gccagtcctc atcatccaca tcttcatcgt  gttcagcttc ttcctgtgtc tctcatcat cctctctgc aacctgtca tcatccgtac  cttgctcatg cagccggtgc agcagcagcg caacgtgaa gtcaagcgcc gggcgctgtg  gatgggtgc acggtcttgg cgggtttcat catctgcttc gtgcccacc acgtgggtga  gctgccctgg acccttgcgt agctgggctt ccaggacagc aaattccacc aggccattaa  tgatgcacat caggtcaccc tctgcctcct tagcaccaac tgtgtcttag accctgttat  ctactgtttc ctcaccaaga agttcccgaa gcacctcacc gaaagtctt acagcatgcg  cagtagccgg aaatgctccc gggccaccac ggatacgggt actgaagtgg ttgtgccatt  caaccagatc cctggcaatt cctcaaaaaa ttagtccttg cttc  MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLWVF ARLYPCKKFN EIKIFMVNLT P  MADMLFLITL PLWIVYQNG GNWILPKFLC NVAGCLFFIN TYCSVAFLGV ITYNRFQAVT  RPIKTAQANT RKRGISLSLV IWAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYEGK  SVPVLIHIF IVFSFVLVFL IILFCNLVII RTLLMQPVQO QRNAEVKRRR LMWVCTVLAV  FIICFVPHV VOLPWTLAEL GFQDSKFHOA INDAHQVTLCLLSTNCVLDLP VIYCFLLTKKF  RKHLTEKFYS MRSRKCRA TTDVTVEVV PFNQPNSL KN  tg9ggg9cgtc cctcttgcgt cccgc9c9gc t9tcaagctg t9ttctagcg gccgagggac A  cgaggggggc taagaaaggg ggc9cc9cgc cagtcagagc caaaaaggcg ctgcggaacg  gggtcc9cgt cgccagt9ct gaggcagagc gtcggagcca caagtgaggg cgtggggaagc  aggacc9cgc acggg9cgtc tggcagggcg cggg9cgcag ggccaggctg ctgggg9cgc </p>	Homo sapiens
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374	8509	G Protein- Coupled Receptor Is8509	NP_009154.1	<p>taccccatgt gaactttctg aggatgcctc acttccctgg gctctgcaga gaacacacag  agagaagact ttcagagctc acagagcag ggagcaggag cactctaagg gaattc  MGNHGSWISP NASEPHNASG AEAAGVNRSA LGFGEAQLY RQFTTVQVW IFIGSLLGNE P  MVLWSTCRTT VKFSVNRFI KNLACSGICA SLVCVPFDII LSTSPHCWW IYTMFLCKVV  KFLHKVFCST TILSPAIAL DRYYSVLYPL ERKISDAKSR ELVMIWAHA VVASVPVFAV  TNVADIYATS TCTEWSNSL GHLVYLVYN ITTVIVPVV VFLELILRR ALSASQKKKV  IIAALRPQN TISIPYASQR EAEHLATLIS MVMVFILCSV PYATLVVYQT VLNVPTDSVF  LLLTAVLWLPK VSLLANPVLF LTVNKSVRKC LIGTLVQLHH RYSRRNVST GSGMAEASLE  PSIRSGSOLL EMFHIGQQQI FKPTEDDEES EAKYIGSADF QAKELFSTCL EGEQGPQFAP  SAPPLSTVDS VSQVAPAAPV EPETFPDKYS LQFGFGPFEL PPQWLSETRN SKKRLLPPLG  NTPEELIQTK VPKVGRVERK MSRNKVSIF PKVDS</p>	Homo sapiens
375	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NM_006173	<p>ttgataggga tagaaacaca ttgggctgct tctatagtta acaagatgct gttacattcc A  ttgcctcact agctctgaag actatactag cgggacaaag aaagcacctg agatgagctg  agaggagggt aaaggtacac agagatcccc tggatatattg ttctatgtcc tctcaggggc  tttgctacca ctagagaatt atccatatta agaacttgca ttgatattct gggttctgtt  tcatttttta gggctcctcaag agcacgctca agtcattcac atgtttccat caaatacaga  cacagatcag ggaagattaa accctactaa ttctctgctg gatgctctac acaaggtgc  cttccaagaa ctaatggcca aaatatccac ccacaacaca aataagctta gaaaatctct  tcttacaatc ctgacacaaat ggaagtctcc ctataaccacc cagcatctaa tacaaccagg  acaaagaaca acaactcggc atttttttac tttagagctct gtcaacctcc ttctccagct  ttactcctat tatgcatagc ctatactgtg gctctaatg ttggcctttt tggaaacctc  tctctcatca tcatcatctt taagaagcag agaaaagctc agaattttcac cagcatactg  attgccaatc tctccctctc tgataccttg ggtggtgca ttgtgcatcca ttttactatc  atctacactc tgatggacca ctggataatt ttctcacttg ggggatacca tctcactat  gtgcagagtg tctcaatctc tgtgtccata ttctcacttg tatcactgc tgcgaaaga  tatcagctaa ttgtgaacct ccgtggctgg agcccagtg tgaactatgc ctactggggc  atcacactga ttgggctgtt ttccctcttg ctgtctattc ccttcttctt gtctaccac  ctcactgatg agcccttccg caacctctct ctcctccactg acctctacac ccaccagggtg  gcctgtgtgg agaactggcc ctccaaaag gaccggctgc tcttaccac ctccctttt  ctgctgcagt atttgttcc tctaggcttc atcctcatct gctacttgaa gattgttatc  tgcctccgca ggagaaatgc aaagttagat aagaagaagg aaaatgagggg ccggtcctaat  gagaacaaga gatatcaac aatgttgatt tccatcgtgg tgacctttgg agcctgctgg  ctgccccgaa tatcttcaat gtcactttg actggtatca tgaggtgctg atgagctgct  accacgacct ggtatttgta gttggcact tgggtgctat ggttccaca tgtataaacc  ctctctttta tggctttctc aacaaaaatt tccaaaaagg cctggtagtg cttattcacc  actgctgggtg cttcacacct caggaaagat gtgaaaaat tgccatctcc actatgcaca  cagactccaa gaggtcttta agattggctc gtataaacac aggtatataa aaattgataa  tgctgaagct cttcttgaat gggagcttga caggtaatgg tgggaatagg gcaagatgca  gaaagaagaa accagaacca aaaatagcaa ctttataacc acttttctct taggctaaga  ctgcctgtct catatgtcta tccaacacac cttccaacat acacgaacac acataccacc  ccttttctct taagaaaaata actctaataa ttcaaacac ctgcccgcca tcatgttg</p>	Homo sapiens

376	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NP_006164.1	<p>caaagaatga gaatgagaaa gcagagagag aggcaaacag cagtgatggc tggggaacaa  tggtcacaga tacttttatt caatggaata tctacaaaag ttatgactaa tgatatgcct  agtaaaaaa ctgctatacc tccttagcac tgagaat  mevslnhpas ntstknns affyescqp pspallllci aytvvlivgl fgnsliliii P  fkqkrkaqnf tsilianlsl sdtlvcmci hftiiytldm hwiifgtmcr ltsyvsqsvsi  svsifslvft averyqlivn prgwkpsvth aywgitiwlf fslilsipff lsyhltdpef  rnslsptdly thqvacvenw pskkdrllft tsllllyfv plgfiliacyl kiviclrrrn  akvdkkene grlnenkrin tmlisivtf gacwlpriess msltgmrc  cattcccacc ctctctctt taataagcag gacgaaaaa gacaaattcc aaagaggatt A  gttcagttca aggaatgaa gaattcagaa taattttggt aaatggattc caatatcggg  aataagaata agctgaacag ttgacctgct ttgaagaaac atactgtcca ttgtctaaa  ataatctata acaacaaac caatcaaat gaattcaaca ttattttccc aggttgaaaa  tcattcagtc cactctaatt tctcagagaa gaatgccag ctctgggctt ttgaaaaatga  tgattgtcat ctgcccctgg ccattgatatt taccttagct ttgttggtt gagctgtgat  cattcttggt gtctctggaa acctggcctt gatcataatc atctgaaac aaaggagat  gagaaatgtt accaatcc ctctctacat ttgtctacac attaatggac cactgggtct ttggtgaggc  catgtgtctc cctttacat ttgtgcaatg tggttcaatc actgtgtcca tttctctct  gatgtgtaag ttgaatcctt tgatcagtc gataatcaac cctcgaggggt ggagacaaaa  ggttctcatt gctgtggaac gacatcagct gatttgctg gatttggtc ctgtctctct  taatagacat gcttatgtag taatgactga tgagccgttc caaatgtgaa cacttgatgc  gcctttcctg atctaccaag gctttgatca atttccatgc gactctcata ggttgcctta  gtacaaaagc aaatacgtgt gctttgatca atttccatgc gactctcata ggttgcctta  taccactctc ctcttggtgc tgcagtattt tgggtccactt tgttttatat ttatttgcta  cttcaagata tatatacgcc taaaaggag aaacaacatg atggacaaga tgagagacaa  taagtaacag tccagtgaac ccaaaagaat caatatcatg ctgctctcca ttgtggtagc  atttgcagtc tgtggtctcc ctcttaccat cttaaactat gtgttgattt ggaatcatca  gatcattgct acctgcaacc acaatctgtt attcctgctc tgccacctca cagcaatgat  atccacttgt gtcaacccca tattttatgg gttcctgaac aaaaacttcc agagagactt  gcagttcttc tcaactttt gtgatttccg gtctcgggat gatgatbty aaacaatagc  catgtccacy atgcacacag atgtttccaa aacttctttg aagcaagcaa gccagtcgc  atttaaaaa atcaacaaca atgatgataa tgaaaaaatc tgaactact tatagcctat  ggtcccgat gacatctgtt taaaacaag cacaacctgc aacatactt gattacctgt  tctcccaagg aatggggttg aaatcatttg aaatgacta agattttctt gtcttgcttt  ttactgcttt tgtgtagtt gtcataatta catttggaa aaaaagtgty ggctttgggg  tctctggaa atagttttga ccagacatct ttgaagtgtc ttttgaat ttatgcatat  aatataaaga cttttact gtactattg gaatgaaatt tctttaagt attacgatgc  gctgacttca gaagtaacctg ccatacaata cggctcattag attgggtcat ctgtattaga  ttagattaga ttagattgtc aacagattgg gccatctta tttatgata ggcattctt  tagtgttta caatagtaac agtatgcaa agcagcttc aggagccgaa agatagctt  gaagtcattc agaagtgtt tgaggtttct gtttttgggt ggttttgggt tgttttttt  ttttttcacc ttaaggaggg ctttcatttc ctcccgactg attgtcactt aaatcaaat</p>	Homo sapiens
377	9421	Neuropeptide Y Receptor Type 1	nm_000909	<p>caatgagagag aggcaaacag cagtgatggc tggggaacaa  tggtcacaga tacttttatt caatggaata tctacaaaag ttatgactaa tgatatgcct  agtaaaaaa ctgctatacc tccttagcac tgagaat  mevslnhpas ntstknns affyescqp pspallllci aytvvlivgl fgnsliliii P  fkqkrkaqnf tsilianlsl sdtlvcmci hftiiytldm hwiifgtmcr ltsyvsqsvsi  svsifslvft averyqlivn prgwkpsvth aywgitiwlf fslilsipff lsyhltdpef  rnslsptdly thqvacvenw pskkdrllft tsllllyfv plgfiliacyl kiviclrrrn  akvdkkene grlnenkrin tmlisivtf gacwlpriess msltgmrc  cattcccacc ctctctctt taataagcag gacgaaaaa gacaaattcc aaagaggatt A  gttcagttca aggaatgaa gaattcagaa taattttggt aaatggattc caatatcggg  aataagaata agctgaacag ttgacctgct ttgaagaaac atactgtcca ttgtctaaa  ataatctata acaacaaac caatcaaat gaattcaaca ttattttccc aggttgaaaa  tcattcagtc cactctaatt tctcagagaa gaatgccag ctctgggctt ttgaaaaatga  tgattgtcat ctgcccctgg ccattgatatt taccttagct ttgttggtt gagctgtgat  cattcttggt gtctctggaa acctggcctt gatcataatc atctgaaac aaaggagat  gagaaatgtt accaatcc ctctctacat ttgtctacac attaatggac cactgggtct ttggtgaggc  catgtgtctc cctttacat ttgtgcaatg tggttcaatc actgtgtcca tttctctct  gatgtgtaag ttgaatcctt tgatcagtc gataatcaac cctcgaggggt ggagacaaaa  ggttctcatt gctgtggaac gacatcagct gatttgctg gatttggtc ctgtctctct  taatagacat gcttatgtag taatgactga tgagccgttc caaatgtgaa cacttgatgc  gcctttcctg atctaccaag gctttgatca atttccatgc gactctcata ggttgcctta  gtacaaaagc aaatacgtgt gctttgatca atttccatgc gactctcata ggttgcctta  taccactctc ctcttggtgc tgcagtattt tgggtccactt tgttttatat ttatttgcta  cttcaagata tatatacgcc taaaaggag aaacaacatg atggacaaga tgagagacaa  taagtaacag tccagtgaac ccaaaagaat caatatcatg ctgctctcca ttgtggtagc  atttgcagtc tgtggtctcc ctcttaccat cttaaactat gtgttgattt ggaatcatca  gatcattgct acctgcaacc acaatctgtt attcctgctc tgccacctca cagcaatgat  atccacttgt gtcaacccca tattttatgg gttcctgaac aaaaacttcc agagagactt  gcagttcttc tcaactttt gtgatttccg gtctcgggat gatgatbty aaacaatagc  catgtccacy atgcacacag atgtttccaa aacttctttg aagcaagcaa gccagtcgc  atttaaaaa atcaacaaca atgatgataa tgaaaaaatc tgaactact tatagcctat  ggtcccgat gacatctgtt taaaacaag cacaacctgc aacatactt gattacctgt  tctcccaagg aatggggttg aaatcatttg aaatgacta agattttctt gtcttgcttt  ttactgcttt tgtgtagtt gtcataatta catttggaa aaaaagtgty ggctttgggg  tctctggaa atagttttga ccagacatct ttgaagtgtc ttttgaat ttatgcatat  aatataaaga cttttact gtactattg gaatgaaatt tctttaagt attacgatgc  gctgacttca gaagtaacctg ccatacaata cggctcattag attgggtcat ctgtattaga  ttagattaga ttagattgtc aacagattgg gccatctta tttatgata ggcattctt  tagtgttta caatagtaac agtatgcaa agcagcttc aggagccgaa agatagctt  gaagtcattc agaagtgtt tgaggtttct gtttttgggt ggttttgggt tgttttttt  ttttttcacc ttaaggaggg ctttcatttc ctcccgactg attgtcactt aaatcaaat</p>	Homo sapiens

378	9421	Neuropeptide Y Receptor Type 1	NP_000900.1	<p>                     ttaaaaaatga ataaaaagagc atactttctca gctgcaaaata ttatggagaa ttgggcacccc                      acaggaatga agagagaaaag cagctcccca acttcaaaac ctttttggtta cctgacaaaca                      agagcatttt agagtaatta atttaataaa gtaaatagat ttccatttt ttacacagac tgttcagtgt                      tataattatt tgaattgatg gtcaagagat ttccatttt ttacacagac tgttcagtgt                      ttgtcaagct tctggtctaa tatgtactcg aaagactttc cgtttacaat ttgtagaaac                      acaaatatcg ttttccatac agcagtgcct atagactttc tgaatttaac ttccaatgtc                      catctttcaa aggaagtaac accaaggtaac atagttaaaag gaattttcac tttaacctagc                      agggaaaaat acacaaaaac tgcagatact tcataatagcc cttttaact tgtataaaact                      gtgtgacttg tggcgtctta taaataatgc actgtaaaga ttactgaata gttgtgtcat                      gtaaatgtgc ctaatttcat gtatcttgta atcatgattg agcctcagaa tcatttggag                      aaactatatt ttaaaagaaca agacatactt caatgtatta tacagataaa gtattacatg                      tgttgattt taaaaggcgc gacattttat taaatcaat attgttttg ctttttctga                      ggagtctctt tcaagtttcat tttttctcat cccatgactt cctccgatg gt                      LIIILKQKE MRNVNIIIV NLSFSDLLVA DDCHLPLAMI FTLLALAYGAV IILGVSGNLA P                      CVSITVSIFS LVLIAVERHQ LIINPRGWRP NNRHAYVGIA VIVWLAVASS LPFLIYQVMT                      DEPFQNTLD AYKDKYVCFD QFPSDSHRLS YTTLLLVLYQ FGPLCFIFIC YFKIYIRLKR                      RNMMDKMRD NKYSRSETKR INIMLLSIV AFVLCWLPIT IFNTVFDWNH QIIATCNHNL                      LFLILCHLTAM ISTCVNPIFY GFLNKNFORD LQFFNFCD FRSRDDDYETI AMSTMHTDVS                      KTSLKQASPV AFKKINNDND NEKI                      agccgagcga gggcaggat gggagggcac ccgagctcc gtctcgtcaa ggcccttctc A                      cttctgggc tgaaccccg cttgcctcc ctcaggacc agcactgcga ggcctgtctc                      ctggccagca acatctcaga caatggctac cggagtgcc tggccaatgg cagctggcc                      gccgcgtga attactccga gtgccaggag atcctcaatg aggagaaaaa aagcaagggtg                      cactaccatg tgcagtcac catcaactac ctgggccact gtatctccct ggtggccctc                      ctggtggcct ttgtcctctt tctgcgctc agagcatcc ggtgcctgcg aaacatcatc                      cactggaacc tcatctccgc cttcatctg ccgaacgcca cctgggtcgt ggtccagcta                      accatgagcc ccgaggtcca ccagagcaac gtgggctggt gcagggtggt gacagccgcc                      tacaactact tccatgtgac caacttctc tggatgttcg gcaggggctg ctacctgcac                      acagccatcg tgcaccta ctcactgac cggctgcgca aatggatgtt catctgcatt                      ggctggggtg tggccttccc catctgtg gctgggcca ttgggaagct gtactacgac                      aatgagaagt gctggtttgg caaaaggcct aggtgtgaca ccgactacat ctaccagggc                      cccatgatcc tggctcgtg gatcaattc atcttcttt tcaacatcgt ccgcatcctc                      atgaccaagc tccgggcac caccagctc gagaccattc agtacaggaa ggcgtgtgaaa                      gccactctgg tgcgtctgccc cctcctgggc atcacctaca tgcgtgtctt cgtcaatccc                      ggggaggatg aggtctcccc ggtcgtcttc atctactca actcctcctt ggaatccttc                      caggccttct ttgtgtctgt gttctactgt ttcctcaata gtgaggtccg ttctgceatc                      cggaagaggt ggcaccggtg gcaggacaag cactcgatcc gtcgccgagt ggcctgtgcc                      atgtccatcc ccacctcccc aaccctgtgc agctttcaca gcatcaagca gtccacagca                      gtctga                 </p>	Homo sapiens
379	9834	Corticotropin releasing factor Receptor 1	NM_004382	<p>                     agccgagcga gggcaggat gggagggcac ccgagctcc gtctcgtcaa ggcccttctc A                      cttctgggc tgaaccccg cttgcctcc ctcaggacc agcactgcga ggcctgtctc                      ctggccagca acatctcaga caatggctac cggagtgcc tggccaatgg cagctggcc                      gccgcgtga attactccga gtgccaggag atcctcaatg aggagaaaaa aagcaagggtg                      cactaccatg tgcagtcac catcaactac ctgggccact gtatctccct ggtggccctc                      ctggtggcct ttgtcctctt tctgcgctc agagcatcc ggtgcctgcg aaacatcatc                      cactggaacc tcatctccgc cttcatctg ccgaacgcca cctgggtcgt ggtccagcta                      accatgagcc ccgaggtcca ccagagcaac gtgggctggt gcagggtggt gacagccgcc                      tacaactact tccatgtgac caacttctc tggatgttcg gcaggggctg ctacctgcac                      acagccatcg tgcaccta ctcactgac cggctgcgca aatggatgtt catctgcatt                      ggctggggtg tggccttccc catctgtg gctgggcca ttgggaagct gtactacgac                      aatgagaagt gctggtttgg caaaaggcct aggtgtgaca ccgactacat ctaccagggc                      cccatgatcc tggctcgtg gatcaattc atcttcttt tcaacatcgt ccgcatcctc                      atgaccaagc tccgggcac caccagctc gagaccattc agtacaggaa ggcgtgtgaaa                      gccactctgg tgcgtctgccc cctcctgggc atcacctaca tgcgtgtctt cgtcaatccc                      ggggaggatg aggtctcccc ggtcgtcttc atctactca actcctcctt ggaatccttc                      caggccttct ttgtgtctgt gttctactgt ttcctcaata gtgaggtccg ttctgceatc                      cggaagaggt ggcaccggtg gcaggacaag cactcgatcc gtcgccgagt ggcctgtgcc                      atgtccatcc ccacctcccc aaccctgtgc agctttcaca gcatcaagca gtccacagca                      gtctga                 </p>	Homo sapiens



382	10457	Frizzled-2	NP_001457.1	MRPRSALPRL LLPLLLLPAA GPAQFHGEKG ISIPDHGFCQ PISIPCLCTDI AYNQTIMPNL P LIGHTNQEDAG LEVHOFYPLV KVQCSPELRF FLCSMYAPVC TVLEQAIPPP RSICERARQG CEALMNKGFQ QWPERLRCEH FPRHGAEOIC VQONHSEDA PALITAPP PP GLQPGAGGTP GGPGGGGAPP RYATLEHPFH CPRVLKVPSY LSYKFLGERD CAAPCEPAPP DGSMEFFSQEE TRFARLWILT WSVLCCASTF FTVTTLVDM QRFYPERPI IFSLGCTMV SVAYIAGFVL QERVVCNERF SEDGYRTVQ GTKKEGCTIL FMMLYFFSMA SSIWWVILSL TWFLAAGMKW GHEAIEANSQ YFHAAWAVP AVKTITILAM QOIDGDLSS VCFVGLNSLD PLRGFVLAPL FVYLFIGTSF LLAGEVSLFR IRTIMKHDGT KTEKLERLMV RIGVFSVLYT VPATIVIACY FYEQA FREHW ERSWVSQCHK SLAIPCAPHY TPRMSPDFTV YMIKYLMTLI VGITSGFWIW SGKTLHSWRK FYRLTNSRH GETTV	Homo sapiens
383	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	NM_022571	atggccttac tgggcagcca gcactccggc gccccctccg cggccggggc acctggcggg A acttctctcag cggccacggc ggcctgtctc tcttccagca cctggcgagc cgcggcgctg gggaacctga cgcagcaag cggaggcggc acagctgcgc ctcccggtgg cgcggcgctt ggcgggtccg ggcagcgcg ggcggcggg cggcggtga ggcggcgctg aggcggcgag gcggcgccgc tgcgtgcga cggagctgca gtggcgggc aggcgtcgt cctcctgctc atcttctgc tgtctagcct tggcaactgc gcggtgatgg ggggtgatgt gaagcacggg cagctccgca cgtcaccac cgccttcac cgtcgtcgt cctatcgga tctgctcacg gcgctgctc gcccgccgc cgccttctc gaccttca ctcggccggc gggttcggcg cctgcgtgc cgcgggggc ctggcgggc ttctgcggc caagcgcctt cttcagctcg tgcttcggca tgcgtacgc tgcgtggtgc tgcgtatctg ttggaccgtt actgcgtat cgtcggccgc cgcgggagaa gatcggcgc cgcgcgcgc tgcagctgct ggcggcgcc tggtgacgg cccctggcct ctccttgccc tgggagctgc tgcggcgccc ccgggaactc gcggcgggc agagcttcca cggctgcctc taccggacct ccccgagccc cgcgcagctg ggcgccctc tgcggtggg gctggtggtg gctgctacc tgcgtccctt cctgctcctc tgcttctgc actaccacat ctgcaagacg gtgcgcctgt cggacgtgcg cgtgcggcgg gtgaacacct acgcgcgct gctgcgttct tgcagcaggt gcgcacggc accaccgtcc tcatcatga	Homo sapiens
384	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	NP_072093.1	MALLGSQHSQ APSAAGPPGG TSSAATAAVL SFSTVATAAL GNLSASGGG TAAAPGGGGL P GGSGAAREAG AAVRRPLGPE AAPLLSHGAA VAAQALVLLI IFLLSLGNC AVMGVIVKHR QLRTVTNAFI LSLSLDLIT ALICLPAAFL DLFTPPGSSA PALPAGPWRG FCRPSRFFSS CFGIVYAQRG AHLVGPLLRY RRPPEKIGR RRALQLLAGA WLTAALGFSLP WELLGAPREL AAGQSFHGCL YRTSPDPAQL GGPFSVGLV ACYLLPFLLI CFCHYHICKT VRLSDVRVRP VNTYARVLRS SARCAPPSS SS	Homo sapiens
385	14198	Interleukin-8 Receptor B	nm_001557	cattcagaga cagaaggtgg atagacaaat ctcacacctt agactggtag gctcctccag A aagccatcag acaggaagat gtgaaaatcc ccagcactca tcccagaatc actaagtggc acctgtcctg ggcacaagtc ccaggacaga cctcattggt cctctgtggg aatacctccc caggagggca tctgtgattt ccccttgca acccaggtca gaagtctcat cgtcaaggtt gtttcatctt ttttttctg tctaacagct ctgactacca cccaaccttg aggcacagtg aagacatcgg tggccactcc aataacagca ggtcacagct gctcttctgg aggtgtccta caggtgaaa gcccagcagc ccagtcagga ttttaagtta cctcaaaaat ggaagatttt	Homo sapiens

aacatggaga gtgacagcctt tgaagatttc tggaaagggtg aagatcttag taattacagt  
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386	14198	Interleukin-8 Receptor B	NP_001548.1	MEDFNMESDS LSLLGNSLVM LVILYSRVGR VSDTVYLNL VWVSLKEVNF YSGILLACI SVDRYLAI VH LLFRRTVYSS NVSPACYEDM RVIFAVVLIF LLCWLPYNLV AHMGQKHRAM PLIYAFIGQK FRHGLLKILA ILGILHSCIN	FEDFWKGEDL SNYSYSTLP PFLDDAAPCE ALADLLFALT ATRTLTKRY LRILPQSGF IVPLLMFLC YGFTLRLTFK LLADTLMTQ VIQETCERN HIDRALDATE PKDSRPSFVG SSSGHTSTTL	PESLEINKYF LPIWAASKVN GLSLLALPV LVKFLCLSIW YGFTLRLTFK VIQETCERN HIDRALDATE PKDSRPSFVG SSSGHTSTTL	Homo sapiens
387	14641	Calcitonin Receptor	NM_001742	cagaattcca gtgcttgga tcaaacctat gatggatgca aggtccatat agtattgtcc tacttgatgca tgccaaactat gtactatttg gattttcgtg tcttacttac tgagagctc catgatggcc tgtcgtggct gttcccgctg ctgtcggctg acttgtggct ggaaacccat tgtgccccctg tggaagata gaccatctac attcaaaatt tgagccgct gaatgaacca agagcaagag catttcctgg tatcatttgt ttggtactgt tccatcattc aaaaacaatg tatacctttg ttagattatt ttctgatgtt ctctgcaaga tgcatctggc	atcttcaaaa tcttaaatca agcccaagcc gctatgaccc cctgggatgg gccagatta aaggtgtttg atgctttcac gtcattctct gccttgctg ctatgattat accgggtgag tgcaactatt gtgtttactg gtgccaacca ccatttgtct ttttgctcaa cccacatgta agcgttgggg ctggcgacat aaggcgagga gaatgtgaag atgcatttaa tcagtgaatt gacagtctag gagatgcaaa agttcacct aatattataa atcactgtca gctatggatc tttaccatcc ttctaataga atgctttgaa	aggttcacat attcttctg gtcgtaggac ttaccggcat tggtgatgca ttttcggat gtttaaaca ctgaaaaaca ctgaagaatg accctagtga accctgcaca ctggttgaag ctgcaagatt ctgtgaagg cttgccgtg tattatctct ggcggtgact tcaatgacaa catggacctg tcatgtgtga cctgaaggct gtgaaggcca ccatgatctct ctttccctgg agaccttcca acaagatgct tcttcagggt tctttgttgc cctgaaccac gtgaagcgcc aatggggcca gagggcgccc tccaaccgt ctgctgcgc cccaatttac atctgccatc aggagctgag tgaatatcat gcaaacacag catcgtgatc actgagccat atctctccag gaaccgaaca aaatctgaag aagtttattc tcccactgca acttgtgaac atgcaagcaa agttatcaaa caggtgtgct cttgtcaata ctgagccatt ttttaaactct ggattttgaa tttttttaa ttttcagtc aaccacatga actacgtgac aatatgtgaa gaaaaagacc atcttagatc	Homo sapiens



388	14641	Calcitonin Receptor	NP_001733.1	<p>aaacattaca tgctcagctt ggttttggac aagcctgtcc attgggcagg acctagctgt  tgtaagaat tggctttaat gttgaatgta ttttggttc tgatgttat aaactgagag  gtcacaaaaga atctatcact aaaaattttt aaaaactgc caaaaatata attcttagtg  gaagacaata ctccctttaa agagagtttg cactccctt aaactccagg attataaag  caaattactc caaggtttat aaagcagatt acctcttgcg ctgggtgtgt attagcagt  aaaagataaa tttgttgaat attgtaatt aaaagacttc acataagtc attaactgct  ttccacccag cttcaagct taaaagagc tcaggctttt ccaggaaagt ccaggagggc  taattagaaa tcaactgtg gttgaccgt tgttcttctg tattacaaa caggaggga  aaaaattaac tgcctcaaat ttaaccataa atcaattcat gtttaacgtt tctcattaaa  atccagtatt atattatcat atctctctt acttccagt ataagatttt tgaataatcct  gaataaaacca gtatcgttac tggcactga aattaatttg tgaatttgca acagtaatca  gagttaccat tatttaattt gtatgtaaa tgaggaggtta cattgaaacc ctccaaatct  ccagctcat ctatgtcata ttttgcact gctttcaga agtgatttag ttgtggaag  ataataaatt gattgttat ggtacatat ttagcgacc cagagaaaa taattatat  tctacagaga aatgaattt gggatactaa agtagtttaa gtctccttta ctgaatgtaa  gggggggac gaaagaaagg tatttttcca atcacagtg tatgtagtat tgttctatt  ttgtttacaa acatggaaa cagagtatt ctggcagctg tggtaaaaa gtgataatat  attgctaaaa tatttagat gttattatgc taatatagta ggggttgaag aaaaacaaa  agcttattat agaattgcac atagttctgc ccaaatatg tgaatgctt atgcttgtg  atatgtataa attaatcac agtagcttaa aagcaaaaa atgtatat tgcataattt  ctaagaat atattatca tctttcatt c</p>	YPTIEPKPFL YVVRKKMMD AQYKCYDRMQ P SYQFCPDYFP DFDPSEKVTK YCDEKGVWEK FTLVISLGIF VFFRSLGCQR ILHFFHQYMM ACNYFWMLE RVPTTIHAIT RAVYENDNCW LSVETHLLYI AVKATMILVP LLGIQFVVFP YCFCNNEVQT TVKRQWAQFK IQWNQWGR PANNQGEESA EIIPLNIEQ ESSA	Homo sapiens
389	16041	C-C Chemokine Receptor 6	NM_004367	<p>caaacgttcc caaatcttcc cagtcggctt gcagagactc cttgctccc ggagataacc A  agaagctgca tcttattgac agatgtcat cacattggtg agctggagtc atcagattgt  ggggcccgga gtgagctga agggagtga ctagagcact gcctgagagt cacctctact  ttcctgctac cgctgcctgt gagctgaagg ggctgaacca tacactcctt tttctacaac  cagcttgcat ttttctgcc caaatgagc ggggaatcaa tgaatttcag cgatgtttc  gactccagt agattattt tgtgtcagtc aatactcat attactcagt tgattctgag  atgttactgt gctccttgca ggaggtcagg cagttctcca ggctatttgt accgattgcc  tactccttga tctgtgtctt tggcctcctg gggaatattc tgggtgtgat cacccttgc  tttataaga aggcaggctc tatgacagac gtctatctct tgaacatggc cattgcagac  atcctctttg tcttactct cccattctgg gcagtgagtc atgccactgg tgcgtgggtt  ttcagcaaatg ccacgtgcaa gttgttaaaa ggcatctatg ccatcaactt taactgcggg  atgctgctcc tgacttgcat tagcatggac cgggtacatg ccattgtaca ggcgactaag</p>	caaacgttcc caaatcttcc cagtcggctt gcagagactc cttgctccc ggagataacc A agaagctgca tcttattgac agatgtcat cacattggtg agctggagtc atcagattgt ggggcccgga gtgagctga agggagtga ctagagcact gcctgagagt cacctctact ttcctgctac cgctgcctgt gagctgaagg ggctgaacca tacactcctt tttctacaac cagcttgcat ttttctgcc caaatgagc ggggaatcaa tgaatttcag cgatgtttc gactccagt agattattt tgtgtcagtc aatactcat attactcagt tgattctgag atgttactgt gctccttgca ggaggtcagg cagttctcca ggctatttgt accgattgcc tactccttga tctgtgtctt tggcctcctg gggaatattc tgggtgtgat cacccttgc tttataaga aggcaggctc tatgacagac gtctatctct tgaacatggc cattgcagac atcctctttg tcttactct cccattctgg gcagtgagtc atgccactgg tgcgtgggtt ttcagcaaatg ccacgtgcaa gttgttaaaa ggcatctatg ccatcaactt taactgcggg atgctgctcc tgacttgcat tagcatggac cgggtacatg ccattgtaca ggcgactaag	Homo sapiens

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390	16041	C-C Chemokine Receptor 6	NP_004358.1	<p>           aaaaaatgtg ttttgtacat gaagtaggaa tegtatttca gcttcaaggt tcagattgag            gggccactg tttggagagg atggtattca ggctttctca tgtcttcaa atctgttagc            gttgactct agaaatcaaa gaaagaggt ggttaccag acacttctt tgggtgtagc            aatgcgctga tggatctat gaagatgatt catgtcgtaa aactagcaca gaaacatctt            gcttatttgc caaagctggg agatgagctt ctctgcataa tttaaatggt cagataaaatg            aagctgactt atttaagcaa taacctttta aacattttag ctaagatgta taaaaatggt            tcaaaaatat accacatact ttattttctc ttaaatgtag tacattaggt tacatcattt            ttctgtgtg ctgtggcatc aaacaggtg ccatggtaac ctgacactct caggagacat            taagatagaa ggggctgttc ttcagtgtt cccattgatt ctccecatat cttttgtctc            tcaggctctg gccgtctctt cctgagcctt aactgtgt         </p>	<p>           VROFSRLFVP IAYSLICVFG P            FMAVSHATGA WVFSNATCKL            LPRKILICLV WGLSLVLISS            FGFFIPLMFM IFCYTFIVKT            LGKMRSCQS EKLIGYTKTV            YKSSGFSCAG RYSENISRQT         </p>	Homo sapiens
391	16599	Smoothened	NM_005631	<p>           SETADNDNAS SFTM            atggccgctg ccgcccagc gcggggggcg gagctccgc tcttgggggt gctgctgctg A            ctgctgctgg gggacccggg ccgctgagcg gcctcgagcg ggaacgcgac cgggcttggg            cctcggagcg cggcggggag agcgcggcg tgaactggcc tccgcgcgcg            ctgagccact ggcgcggg cgcctctgc gagcgcgtgc gtaacaagt gtgcttgggc            tcggtgctgc cctacggggc cactccaca ctgctggcg gagactcgga ctcccaggag            gaagcgacg gcaagctcgt gctctggtg gccctccgga atgcccccg ctgctgggca            gtgatccag cctgctgtg tgcgtatc atgccaaagt gtgagaatga ccgggtggag            ctgccagcc gtacctctg ccaggccac cgaggccct gtgccatcgt ggagagggag            cgggctggc ctgacttct gcgctgact cctgaccgt tccctgaagg ctgcacgaat            gaggtgcaga acatcaagtt caacagtta gccagtgcg aagtgcctt ggttcggaca            gacaaccca agagctggtg cgaggacgtg gagggctgc gcatccagt ccagaacccg            ctcttcacag aggtgagca ccaggacatg cacagctaca tgcggcctt cggggccgtc            acgggctctt gaagctctt caccctggc acattcgtg ctgactggcg gaactcgaat            cgtaacctg ctgttattct ctctacgtc aatgcgtgct tcttggggg cagcattggc            tggctggccc agttcatgga tgggtgccgc cgagagatcg tctgcgtgc agatggcacc            atgaggcttg gggagccac ctccaatgag actctgtcct gcgtcatcat ctttgtcatc            gtgtactacg cctgtatggc tgggtgtggt tgggttggg tctcaccta tgcctggcac            acttccctta aagccctggg caccacctac cagcctctct cgggcaagac ctccacttic            cactgctca cctgtcact ccccttgtc ctcaactgtg caatccttgc tgtggcgag            gtggatggg actctgtgag tggcattgt ttttggggt acaagaacta ccgataccgt            gcgggcttgc tgtggcccc aatcggtctg gtgtcatcg tggagggcta ctctcatc            cgaggagtca tgaactgtt ctcacatcaag agcaaccacc ccgggtgctg gagtgaagaag            gctgccagca agatcaacga gacctgctg gcctgggca ttttggctt cctggcctt            ggcttggc tcattacctt cagctgccac tctacgact tctcaacca ggctgagtg         </p>	<p>           VROFSRLFVP IAYSLICVFG P            FMAVSHATGA WVFSNATCKL            LPRKILICLV WGLSLVLISS            FGFFIPLMFM IFCYTFIVKT            LGKMRSCQS EKLIGYTKTV            YKSSGFSCAG RYSENISRQT         </p>	Homo sapiens

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ISPELQKRLG	RKKRRRKRKK	EVCPLAPPE	LHPPAPAPST	IPRLPLPRQ	KCLVAAGAWG

393	17250	G Protein- Coupled Receptor GPR45	NM_007227	AGDSCRQGAW TLVSNPFCPE PSPPQDPFLP SAPAPVAWAH GRRQGLGPIH SRTNLMDEL MDADSD	atggcctgca acagcacgtc ccttgaggct tacacatacc tgcctgctgaa caccagcaac A gctcagact cggggctccac ccagttgccc gcacccctca ggatctcctt ggccatagtg atgtgctga tgaccgtggt ggggttccctg ggcaacactg tggctgcat catcgtgtac cagaggccgg ctatgcgtc ggccatcaac ctgctgctg ccacctggc ctctccgac atcatgctgt cctctgctg catgcccctc accgctgca cctcatcac cgtgcgtgg cactttgggg accacttctg ccgctctca gccacgctct actggttttt tgcctggag ggcgtggcca tctgtctcat catcagcgtg gccgcttc tcatcatcgt ccagcgccag gacaagctga acccgcgag ggccaaagt atcatcgcg tctcctgggt gctgtcctc tgcatcgcg ggccctgct cagggctgg acgtggtgg agtgccggc gggggccca cagtgcgtg tgggctacac ggagctccc gctgaccgg catactggt cacttggg gtggcgtgt tcttcgccc ctttggcgt atgtgtgct cctacatgt catcctcaac acggtccgca agaaccgct gcgctgca accagtcgg acagcctgga cctgcggcag ctcaccagg cgggctgct gcgctgcag cggcagcaac aggtcagcgt ggacttgagc ttcaagacca aggccttcac caccatcctg atcctcttc tgggtcttc cctctgctg ctgccccact ccgtctacag cctcctgct gtgttagcc agcgtttta ctgcggttc tcttctacg ccaccagcac ctgcgtcctg tgggtcagtt acctcaagtc cgtcttcaac cccatcgtct actgctggag aatcaaaaaa ttcgcgaggt cctgcataga gttgctgcc cagaccttc aaatcctccc caaagtgcct gacggagatc gaaggagaat ccagccaagc acagtatacg tgtgcaatga aaaccagctc gcggttag MACNSTSLEA YTYLLNTSN ASDSGSTQLP APLRISLAIV MLMTVVGFL GNTVVCIIIV P QRPAMRSAIN LLLATLAFSD IMLSCLMPF TAVTLITVRW HFGDHFCRLS ATLYWFFVLE GVAILLIISV DRFLIIVQRQ DKLNPRAKV IIAVSWLSF CIAGPSLTGW TLVEVPARAP QCVLGYTELP ADRAVVTLV VAVFFAPFGV MLCAYMCILN TVRKNVAVRH NOSDSLDRQ LTRAGLRLQ ROQVSVDL FTKAFTIL ILFVGFSLCW LPHSVYLLS VFSQRFYCGS SFYATSTCVL WFSYLKSVFN PIVYCWRIKK FREACIELLP QTFQILPKVP ERIRRIQPS TVVCNENQS AV	Homo sapiens
394	17250	G Protein- Coupled Receptor GPR45	NP_009158.1	gttcttatga gctgctattg aacacggcag agcctgttgg tgacctgcac acaggagccc A tccagtcagt actgattgaa ttactcaagg ctgcctctct gcaagttaga gcactacagg acgtcgggac tgggcatttc ctccaacat ggcgcacct gctctccgc agccactcgc cactgaggat gccgattctg agaatagcag cttctattac tatgactacc tggatgaagt ggccttcctg ctctgcagga aggatgcagt ggtgtccttt ggcaagtct tctccccagt ctctatagc ctgatttttg tgttggcct cagcgggaa cctcttcttc tcatggctt gtccgttac gtgcctcgca gccgatggt tgagatctat ctgctgaatc tggccatctc caacctctg ttcttggtga cactgccctt ctggggcatc tccgtggcct ggcatgggt cttcgggagt ttcttggtga agatggtgag cactctttat actattaact ttacagtgg catcttttc attagctga tgagcctgga caagtacctg gagatcgttc atgctcagcc ctaccacagg ctgaggaccc gggccaagag cctgctcctt gctaccatag tatgggctgt gtccctggcc gtctccatcc ctgatatggt ctttgtacag acacatgaaa atcccaaggg tgtgtggaac tgcacgcag atttcggcgg gcatgggacc atttgggaagc tcttctccg	Homo sapiens	
395	17345	G Protein- Coupled Receptor D6	NM_001296			Homo sapiens

396 17345 G Protein-  
Coupled  
Receptor D6 NP\_001287.2 Homo sapiens

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LSGNLLLMV LLRYVPRRM VEIYLLNLAI SNLLFLVTLF FWGISVAWHV VFGSFLCKMV  
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VFQTHENPK GWNCHADFG KHGTIWLFL RFQNLGLFL LPLLAMIFFY SRIGCVLVR  
RPAGQGRALK IAAALVVAFF VLWFPYNLTL FLHTLLDLQV FGNCEVSQHL DYALQVTE  
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397 17535 Gaba (b)  
Receptor 1 NM\_001470 Homo sapiens

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398	17535	Gaba (b) Receptor 1	NP_001461.1	MLLLLLLAPL FLRPPGAGGA QTPNATSEGC QIIHPPWEGG IRYRGLTRDQ VKAINFLPVD P YEIEYVCRGE REVVGPKVRK CLANGSWTDM DTPSRCVRIC SKSYLTLENG KVFELTGGDLP ALDGARVDFR CDPDFHLVGS SRSICSQGW STPKPHCQVN RTPHSERRAV YIGALFPMSG GWPGQACQP AVEMALEDVN SRRDILPDYE LKLIHDSKC DPGQATKYLY ELLYNDPIKI IIMPCCSSVS TIVAEARMW NLIVLSYSS SPALSNRQRF PTFERTHPSA TLHNPTRVKL FEKWWKKIA TIQQTTEVFT STLDLEERV KEAGIEIFER QSFSDPAVP VKNLKRQDAR IIIVGLFYETE ARKVFCEVYK ERLFGKKYVW FLIGWYADNW FKIDPSINC TVDEMTAEVE GHITTEIVML NPANTRISIN MTSQEFVEKL TKRLKRHEE TGGFQEAFLA YDAIWALALA LNKTSGGGR SGRLEDFNY NNQITDQIY RAMNSSSTEG VSGHVVDAS GSRMAWTLIE QLQGSYKKI GYDSTKODL SWSKTDKWIG GSPADQTLV IKTFRFLSQK LFISVSVLSS LGIVLAVVCL SFNIYNHVR YIQNSQPNLN NLTAVPLGLD GYHIGRNQFP FVCOARLWLL GLGFSLYGS MFTKIWWVHT VFTKKEEKL WRKLEPWKL YATVGLLVGM DVLTALWQI VDPLHRTIET FAKEPKEDI DSILPQLEH CSSRKMNTWL GIFYGYKGLL LLLGIFLAYE TKSVSTEKIN DHRAVGMAIY NVAVLCLITA PVTMILSSQK DAAFAFASLA IVFSSYITLV VLFVPMRRL ITRGEWQSEA QDTMKTGSST NNNEEKSRLL LEKENRELEK IIAEKEERSV ELRHQLQSRQ QLRSRHPPT PPEPSGGILPR GPPEPPDRLLS CDGSRVHLLY	Homo sapiens
399	17666	Glucagon- Like Peptide 1 Receptor	NM_002062	gaattccggg ttgtgcatc cactctggaa cgcctcgtgt gtggcctgtc ggaatgacat A cgccctcatc agtctccgca cgcgttcccg aggtggcagc gatggcccag tectgaactc ccgcctatgg ccggcgcccc ccggccgctg cgccttgccg tgcgtgtgtc cgggatgggtg ggcaggcccg gcccccgccc ccagggtgcc actgtgtccc tctgggagac ggtgcagaaa tggcagagaat accgacgcca gtgccagcgc tccctgactg aggatccacc tccctgccaca gactgttctt gcaaccggac cttcgatgaa tacgcctgct ggcagatgg ggagccagggc tcgttcgtga atgtcagctg cccctggtag ctgcctctgg ccagcagtgt gccgagggc cacgtgtacc ggttctgac agctgaaggc ctctggctgc agaaggacaa ctccagcctg ccctggaggg acttgtcgga gtgcgaggag tccaaagcag gggagagaa ctccccggag gagcagctcc tgttcctcta catcatctac accgtgggct accgactctc ctctctgtct ctgggttatcg cctctgcgat cctctcggc ttcagacacc tgcactgcac caggaactac atccacctga acctgtttgc atccttcac ctgcgagcat tgcctgtctt catcaaggac gcagccctga agtggatgta tagcacagcc gccagcagc accagtggga tgggtcctc tctacactgg actctctgag ctgccgcctg gtgtttctgc tcatgcagta ctgtgtggcg	Homo sapiens



400 17666 Glucagon-  
Like Peptide  
1 Receptor NP\_002053.1

Homo  
sapiens

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P

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401 18471 G Protein-  
Coupled  
Receptor  
LOC51210 NM\_016372

Homo  
sapiens

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402	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	MDTLEEVTTWA NGSTALPPPL LMKLP SARA KIRITSSPIF ITFYILVFVW ALVGIARAVV SMVTSTSNAA TVADKILWEI TRFFLLAIEL SVIILGLAFG TWESKSSIKR VLAITTVLSL AYSVTQGTLE ILYPDAHLNA EDFNIYGHGG RQFWIVSSCF FFLVYSLVVI LPKTP LKERI SLP SRRSFYV YAGILALNLN LQGLGSVLLC FDIIEGLCCV DATTFLYPSF FAPLIYVAF LRGFFGSEPKI LFSYKQCQVDE TEEDVHLPO PYAVARREGL EAAGAAGASA ASYSSTQFDS AGGVAYLDDI ASMPCHTSGI NSTDSERWKA INA	Homo sapiens
403	19072	G Protein-Coupled Receptor Ls19072	LG100650	agtgatgagc ggcggctgccc ttggcagtgca gtgggctggc ttgtatgtgg gggcctctcc A ctgtgtgcca atgctctggg catctctcagc gtgtggcgcca agcagaagaa gtggaagccc ttggagtcc tgtgtgttac actctggccc accacacatgc taaatgtggc cgtgcccctc gccacctact ccgtgtgtgca cctgcccggc cagcgcctcc accctcacc ttgtcgtgtc ttctctgtc acctccctc cctaccaccg catgtggatg gtctgtggc ctgtcaacta ccgtgtgagc tgtgaagtcc tgggttctt tgggttctaa gcaggcgtga aacaaagac atatctgtg ttgccatgcg cacacaggag ttggccacacc tgtggcatgc ttggagggca ggcaggctca ggaggggctg ctgtaagctg ctggggggcat acacgtagct ttgcatgggt agacacaaagc agccaatata gaatgcttg aagaggagc gtgtgacaatg ttcacagtat ctctatgca aggaacaaag cctgtccaca ctggctgtgc catgactatg atatactggg ggtgtgggtg gccctgggtg ttgggatccc ctacaggtcc ccagaggcct ggggaggccc tgtgggtgac gccagatccc tctgttccac cctgcctcat gccaggctga gcaatgcaa gaagcaggcg gtgcacacag tcatgggtat ctggatgtg tcttctacc ttctggccct gcctgcccgt ggctggcagc acaccagcga gcgttctac accatggct gcgcttcat cgtggctgag atcggcctgg gcttggcgt ctgcttctg ctgctgtgg gggcagcgt gggcctgggc gtgatctgca cagccatgc cctcttccag acgtggccg tgcaggtgg gcgccaggcc gaccggccg ccttaccgt gccaccatc gtgtggagg acgagcagg caagcggcg tcttccatcg atggctcga gccgcca aa accctctgc agaccaggg cctcgtgacc accatagtct tcatctacga ctgctcctg ggttccctg tgctgtggg tgacggcgtc gggtagagg gccgtgtctt gggacagccc ttgtgtgtgt cactctccag gcatcaggtg gttgagtcct cagacccaat cctttgagat gggcttgatc atgttccca ttttccagat	Homo sapiens

404	19072	G Protein- Coupled Receptor	ENSP00000016 4265	SDERRLPGSA VGWLVCGLLS ATYSVQLRR QRPDFEWNEG NAKQAVHTV MGIWMVSFIL	LLANAWGLIS LCKVFVSTFY SALPAVGWHD	VGAKQKKWKP TLTLATCFVS TSERFYTHGC	IEFLLC TLAA TSLSYHRMMW RFIVAEIGLG	THMLNVAVPI VCWPFVNYRLS FGVCFLLLVG	P	Homo sapiens
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Homo  
sapiens

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Coupled  
Receptor  
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sapiens

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Coupled  
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GPR92/GPR93 NM\_020400 Homo  
sapiens



Homo  
sapiens

P

NP\_065133.1

G Protein-  
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GPR92/GPR93

22315

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22925

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Homo  
sapiens

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414	25359	G Protein- Coupled	NP_005291.1	<p>MRSHITMTT TSVSSWPYSS HRMFITNHS DQPPQNFSAT PNVTTCPMDE KLLSTVLTTTS P  YSVIFIVGLV GNIIALYVFL GIHRKRNSIQ IYLLNVAIAD LLLIFCLPFR IMYHINQNKW</p>	Homo sapiens



416 30698 G Protein- Coupled Receptor Ls30698 CAC27252.1 Homo sapiens

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QG

417 30875 G Protein- Coupled Receptor GPR87/GPR95 NM\_023915 Homo sapiens

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418	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	gtgtaggcct tttattgttt gttggaatcg atatgtacaa agtgtaataa aatgtttctt ttcattatcc ttaaaaaaaa aa	Homo sapiens
419	31568	G Protein-Coupled Receptor RE2	NM_007369	GLAVWIFFHI RNKTSFIFYL KNIVVADLIM TLTFPFRIVH DAGEGPWYFK FILCRYTSVL FYANMYTSIV FLGLISIDRY LKVKPFGDS RMYSTITFKV LSVCVWVIMA VLSLPNIILT NGQPTEDNIH DCSKLKSPIG VKWHTAVTVV NSCLFVAVLV ILIGCYAIAI RYIHKSSRQF ISQSSRRKRH NOSIRVVAV FETCELPYHL CRIPFTFSLH DRLIDESAQK ILYYCKEITL FLSACNVCLD PIIFYMCRS FSRRLFKN IRTRESIRS LQSVRRSEVR IYYDYTDV ggccttatct ttccagtcgt ccagcatgct ctgcccaccc cagccgaggt tgcactgacc A atgagcctca actcctccct cagctgcagg aaggagctga gtaatctcac tgaggaggag ggtggcgaag ggggcgtcat catcaccag ttcatcgcca tcattgtcat caccattttt gtctgcctgg gaaacctggt catcgtggtc acctgtaca agaagtccta cctcctcacc ctcagcaaca agttcgtctt cagcctgact ctgtccaaact tctgtctgtc cgtgttggtg ctgccttttg tggtagacag ctcctatcgc agggaatgga tctttggtgt agtgtggtgc aacttctctg cctcctcta cctgctgac cctcctgcca gcatgctaac cctcggggtc attgccatcg accgtacta tgctgtcctg taccctatgg tgaacccat gaagatacaca gggaaccggg ctgtgatggc acttgcttac atctggcttc actcgtctcat cggctgctgt ccaccctgt ttggttggtc atcctggag tttgacagat tcaaatggat gtgtgtggct gcttggcacc gggagcctgg ctacacggcc ttctggcaga tctgtgtgct cctcttcccc ttcttggtca tgctgtgtg ctatggcttc atcttcgctg tggccaggggt caaggcacgc aaggtgcat gtggcacagt cgtcatcgtg gaggaggatg ctcagaggac cgggaggaaag aactccagca cctccacctc ctcttcaggc agcagaggga atgcctttca ggggtgtggtc tactcggcca accagtgcac agccctcatc accatcctgg tggctcctgg tgccttcctg gtcacctggg gccctacat ggtgtgctac gctctgagc cctcctgggg gaaaagctcc gtctccccga gctggagac ttgggccaca tggctgtcct ttgccagcgc tgtctgccac ccctgatct atggactctg gaacaaagca gttcgcacaa aactactggg catgtgcttt gggaccgggt attatcggga accatttgtg caacgacaga ggacttccag gctcttcagc atttccaaca ggaacacaga cctgggacctg tccccacacc tcaactgcgt catggcaggt ggacagcccc tggggcacag cagcagcacg ggggacactg gcttcagctg ctccccaggc tcaggtaacc tgcgtgcttt ataagcctct cactgtcgc gttttccctg tgttgcgctt ccccctgtc gcgtttcccc tgtgcaggct caagagctgg cggagggggca ttccccacgg	Homo sapiens
420	31568	G Protein-Coupled Receptor RE2	NP_031395.1	tg MSLNSSLSCR KELSNIITEE GGEGVITQ FIAIIVITIF VCLGNLVIW TLYKKSyllt P LSNKFVFSLT LSNFLLSVLV LPFVVTSSIR REWIFGVWVC NFSALLYLLI SSASMLTLGV IAIDRYAVL YPMVYPMKIT GNRAVMALVY IWLHSLIGCL PPLFGWSSVE FDEFKVMCVA AWHREPGYA FWQIWCALFP FLVMLVCYGF IFRVARVKAR KVHCGTVVIV EEDAQRTRGRK NSSTSTSSSG SRNRAFQGV YSANQCKALI TILVLGAFM VTWGPYMWVI ASEALWGKSS VSPSLETWAT WLSFASAVCH PLIYGLMNKT VRKELGMCVF GDRYREPFV QRQTSRLFS ISNRITDGL SPHLTALMAG GQPLGHSSST TGTGFCSCQD SGNLRAL atggacacct cccggctcgg tgtgtcctcg tcttgctcctg tgctgtgca gctggcgacc A gggggcagct ctcccaggtc tgggtgtgtg ctgagggggt gccccacaca ctgtcattgc	Homo sapiens
421	36534	G Protein-Coupled	NM_003667		Homo sapiens

Receptor  
GPR49

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tggaacaagat caaacaccc aagcttgatg tcaattaaat ctgatgatgt cgaataacag



304/448

422 36534 G Protein- Coupled Receptor GPR49 NP\_003658.1 Homo sapiens

tcctgtgact caactcaagc cttgtaacc ttaccagct ccagcatcac ttatgacctg  
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 gtggcattg tcccatgtct ctaa  
 MDTSRLGVLL SLPLVLLQAT GGSSPRSGVL LRCPHCHC EPDGRMLLRV DCSDLGSEL P  
 PSNLSVFTSY LDLSMNIQS LLPPLPSLR FLEELRLAGN ALTYIPKGF TGLYSLKVLV  
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 AFRSLSALQA MTLALNKIHH IPDYAFGNLS SLVVLHLNHN RIHSLGKKCF DGLHSLLETLD  
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 LPSLIKLDLS SNLLSSFPIIT GLHGLTHLKL TGNHALQSLI SSENFPKLV IEMPYAYQCC  
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 ERGESVKYSA KFETKAPFSS LKVIILLICAL LALTMAAVPL LGSKYKASPL LCLPLPFGE  
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 PVAFLSFSSL INLTFFISPEV IKFILLVVVP LPACLNPLLY ILFNPHEKED LVSLRKQTYV  
 WTRSKHPSLM SINSDDVEKQ SCDSITQALVT FTSSSIYDYL PPSVSPSPAY PVTESCHLSS  
 VAFVPC

Homo sapiens

423 37498 Xenotropic and Polytropic Retrovirus Receptor (XPR1) NM\_004736

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Homo sapiens

424	NP_004727.1	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	<p>cccttccat aaggtaggct ttgctgattt ctggctggcg gatcagctga acagccctgtc  agtgatactg atggacctgg aatatatgat ctgcttctac agtttggagc tcaaatggga  tgaagtaag ggcctgttgc caataattc agaagaatca ggaatttgcc acaatatac  atatgtgtg cgggccattg ttcagtgcat ttctcattta gttaatgctg gcaagtactc  gcgcgatat cgagacacaa aaaggccctt ccttcattta gttaatgctg gcaagtactc  cacaacttcc ttcatggtgg cgtttgcagc cctttacagc actcacaaa aacgagggtca  ctcggacact atggtgttct ttacactgtg gatgtcttt tatatcatca gttcctgcta  taccctcatc tgggatctca agatggactg ggtctcttc gataagaatg ctggagagaa  cactttcttc cgggaagaga ttgtataccc ccaaaaagcc tactactact gtgccataat  agaggatgtg attctgcgct ttgcttggac tatccaaatc togattacct ctacaacttt  gttgccctcat tctggggaca tcatgtgtac tgctttggc ccaacttgagg tttccggcg  attgtgtgg aacttcttc gctggagaa tgaacatctg aataactgtg gtgaattccg  tgctgtcgg gacatctctg tggcccccct gaacgcagat gatcagactc tctagaaca  gatgatggac caggatgatg ggtacgaaa cgcgcagaag aatcggtcac ggaagtacaa  ccagagcata tccctgcgc atgatgaagc cgcttctcaa tccaaggctc gtgacactaa  ggtattgata gaagacacag atgatgaagc taacacttga atttctgaa gtctagctta  acatctttgg ttttctact ctacaactct tctctgacc aacgcaacct ctagtacctt  tccagccgaa acaggagaa aacacataac acattttccg agctcttccg gatcggatcc  tatggactcc aaacaagctc actgtgttct tttcttttc tctgtgttta attttaattt  tctattttca aaacaagtat ttacttcatt tgccaactcag aggatgtttt aagaaacaaa  acatagtatc ttatggattg ttacacata caagacata gatccctatc aggatgaaga  acaggcattg caaggaccct ctgatggag cgtactgaga tatctcggct tccgctcagc  ccggttttga atggttgaa ccggacattg gtttttaaat ttttctcag ttatgtgga  gaattttttt ctttcttca taccagcgc aaaggcactg gccgacttg caggaagaat  gcaacttaaa gcagtacctt cattcatgaa gctacttttt aattgatgt aacttttctt  attttgggaa ggtgtgctg gtgggtggga aatatgatgt attgtttaca catagttttc  tcattattta tgaacttaaa ccatacagaa tgatataact cctgtgcaat gaaggtgata  acagtaaaag aaggcaggag aaaaaaaaa</p> <p>SAQDQAPSVE VTDEDTVKRY FAKFEEKFFQ P  LQSSLDAQKE STGVTTLRQR RKPVFHLSHE  LNFTGFRKIL KHKDKILETS RGADWRVAHV  RQKAMKRLRV PPLGAAQAPAP AWTTFRVGLF  IYRGFLLIE FLELLGINTY GWRQAGVNHV  LLACFFAPIS VIFTVYVPLA LYGFVFFLI  FADFVLADQL NSLSVILMDL EYMICFYSLE  VQCIPAWLRF IQCLRRYRDT KRAFFHLVNA  FYLWIVFYII SSCYTLIWDL KMDWGLFDKN  FANTIQISIT STLLPHSGD IIATVFAPLE  VAPLNADDQT LLEQMMDDDD GVRNRQKNRS  DDEANT</p>	Homo sapiens
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425	40881	Lung Seven Transmembran e Receptor 2 (IUSTR2)	AX073578	agagatggca gtgagcgaga ggagggggct cggccgcggg agccccgcgg agtgggggca A gcggtactt ctggtgctgc tgttgggtgg ctgctccggg cgcattccacc ggctggcgct gacggggag aagcgagcgg acatccagct gaacagcttc ggtttctaca ccaatggctc tctggagtg gagttagcgg tcccgcgct gggcctccgg gggcagaaag agaagtccct gctggtggg ttcagttcca gccgggttcg gctggcaga gttcgtctct attcaaccg ggatttccag gactgcccct tccagaaaaa cagtagcagt tctctggtcc tgttctctat caacaccaag gatctgcagg tccaggtgcg gaagtatga ggcagaaga cgttgtttat ctttcccggt cttctcccg aagcacctc caaacccagg ctcccgaaag cacaggccac agtccccgc aaggtggatg gcggaggag ctctgcagcc agcaagccca agtcaacacc cgagtgatt cagggtccta gtgggaagg caaggacctg gtgttgggct tgagccacct caacaactcc tacaacttca gtttccact ggtgatcggc tctcaggcgg aagaaggcca gtacagcctg aacttccaca actgcaacaa ttcagtgcga ggaaggagc atccattcga catcacggtg atgatccggg agaagaacc cgatggcttc ctgtcggcag cggagatgcc ccttttcaag ctctacatgg tcatgtccg ctgcttctct gccgtggca tcttctgggt gtccatcctc tgcaggaaaca cgtacagcgt ctccaagatc cactggctca tggcggcctt ggccttcacc aagagcatct ctctcctctt ccacagcatc aactactact tcatcaacag ccagggccac cccatcgaag gcccttgcgt catgtactac atgcacacc tgcgaagg cgccctctc ttcacacca tgcctctgat tggctcaggc tgggcttca tcaagtactg cctgtcggat aaggagaaga aggtcttgg gatcgtgat cccatcagg tcttggccaa cgtggcctac atcatcatcg agtcccgga ggaaggcgc agcactacg tgcgtgga ggagattttg ttcctgggtg acctcatctg ctgtgtggtc atctgttcc ccgtagtctg gtccatccgg catctccagg atgcgtctgg cacagacggg aaggtggcag tgaacctggc caagctgaag ctgttccggc attactatgt catggtcatc tgcactgtct acttcaccg catcatcgcc atcctgctgc aggtggctgt gccctttcag tggcagtggc tgtaccagct cttgggtggg ggtccaccc tggccttctt cgtgtcacg ggtacaagt tccagccac agggaacaa cctgacctgc agtgcccca ggagacgag gaggatgttc agatggagca agtaatgac gactctgggt tccgggaagg cctctccaa gtcaacaaaa cagccagcgg gcgggaactg ttatgatcac ctccacatct cagaccaaag ggtcgtctc cccagcatt tctcactcct gcccttctc cacagcgtat gtggggagggt ggaggggtc catgtggacc aggcggccag ctcccgggga ccccggttcc cggacaagcc catttggaa agagtccct tctctcccc aaatatggg cagccctgtc cttaaccccg gaccaccct ccttccagc tatgtgtaca ataagacca atctgtttgg ct	Homo sapiens
426	40881	Lung Seven Transmembran e Receptor 2 (IUSTR2)	CAC28410.1	MAVSERRGLG RGSPAEMGQR LLLVLLGGC SGRHRLALT GEKRAIQLN SFGFTNGSL P EVELSVLRG LREAEKSL L VGFSLSRVS GRVRSYSTRD FQDCPLQKNS SSFLVLFLIN TKDLQVVRK YGEQKTLFIF PGLLPEAPSK PGLPKPQATV PRKVDGGSTS AASKPKSTPA VIQGPSGKDK DLVLGLSHLN NSYNFSFHV IGSQAEEGQY SLNFHNCNNS VPGKEHPFDI TVMIREKNPD GFLSAEMPL FKLYMVSAC FLAAGIFWVS ILCRNTYSVF KHWLMAALA FTKSISLLFH SINYFINSQ GHPIEGLAM YYIAHLKWS LLFITIALIG SGWAFIKYVL SDKEKKVFGI VIPMQVLNV AYIIIESREE GASDYLWKE ILFLVDLIC GAILFPVWS IRHLQDASGT DGKVAVNLAK LKLFHYHYVM VICVYFTRI IAILQVAVP FQWQWLYQLL VEGSTLAFFV LTGYKFQPTG NNPLYQLPQE DEEDVQMEQV MTDGFGREGL SKVNKTASGR	Homo sapiens



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 ctgacttctc ttgtcaatat tcttttctg attattttaa ttttcttga tttatatgtt  
 aaaaatcaaa atgttaaaat caatgaata aattgacgt taaga  
 NP\_005747.1 MFVSVRQCGH VGRTEEVLLT FKIFLVICL HWLVTSLEE DTDNSSLSP PAKLSVVSEFA P  
 PSSNEVETTS LNDVTLSLLP SNETEKTKIT IVKTFNASGV KPQNICNLS SICNDSAFRR SICNDSAFRR  
 42697 G Protein- Coupled  
 428 Homo sapiens

Receptor  
GPR64

429	45937	KIAA1624 Protein	AF376725	GEIMFQYDKE STVPQNHIT NGTLTGVLISL SELKRSELNK TIQTLSETYF IMCATAEAQS	4	Homo sapiens
				TLNCTFTIKL NNTMNACAAI AALERVKIRP MEHCSSVRI PCPSSPEELG KLQCDLQDPI		
				VCLADHPRGP PFSSSQSIPV VPRATVLSQV PKATSFAPPPV SPGEIQPLS		
				PQPSAPIASS PAIDMPQSE TISSPMQTH VSGTPPVKA SFSSPTVSAP ANVNTTSAPP		
				VQTDIVNTSS ISDLENQVLQ MEKALSIGSL EPNLAGEMIN QVSRLLHSPP DMLAPLAQRL		
				LKVVDDIGLQ INFSTTISL TSPSLALAVI RVNASSENTT TFVAQDPANL QVSETOAPE		
				NSIGTITLPS SLMNNLPAHD MELASRVQFN FFETPALFQD PSLENLSLIS YVISSSVANL		
				TVRNLTNRVT VTLKHINPSQ DELTVRCVFW DLGRNGRGG WSDNGCSVKD RRLNETICTC		
				SHLTSFGVLL DLSRTSVLPA QMMALTFITY IGCGLSSIFL SVTLVTYIAF EKIRRDYPSK		
				ILIQLCALLL LNLVFLDLS WIALYRMQGL CISVAVFLHY FLLVSFTWMG LEAFHMYLAL		
				VKVENTYIRK YILKFCIVGW GVPVAVVTII LTISPDPNGS GSYGKFPNGS PDDFCWNNN		
				AVFYITVVG YFCVIFLLNVS MFIVVLVQLC RIKKKKQLGA QRKTSIQDLR SIAGLTFLLG		
				ITWGEAFFAW GPNVVTFMYL FAIFNTLQGF FIFIFYCVAK ENVRKQWRRY LCCGKLRLAE		
				NSDWSKTATN GLKKQTVNQG VSSSSNSLQS SSNSTNSTTL LVNNDCSVHA SGNNGMASTER		
				NGVSFSVQNG DVCLHDFTGK QHMFNEKEDS CNGKGRMALR RTSKRGSLSHF IEQM		
				gaacaaacat ggccgctctg gcgcccgtcg gctccccgc ccccccggt cctaggctgg A		
				ccgcgggacct ccgctgctc ccaatgctgg gttgctgca gttgctggc ggcctggcc		
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				ctggtaccca gttacaaaag atcatcttca gcagggtga gaaagtcctt ggtcagagcc		
				aggagcctaa tgttaacctt gcttcagcag gcaaccagac ccagaagaca caagatggtg		
				gaaagtctaa aagaagtaca gtggattcaa agccatggg agagaaatcc ttttctgttc		
				ataataatgg tggggcagtg tcatttcagt tttctttaa catcagcact gatgaccaag		
				aaggccctta cagtctttat ttcatataat gccttggaag agaattgcca agtgacaagt		
				ttacattcag ccttgatatt gagatcacag agaagaatcc tgacagctac cctcagcag		
				gagaaattcc tctcccaaaa ttatacatc caatggcctt ttttctctt ttttctggga		
				ccatctggat tcatatcctt cgaataacgac ggaatgatgt atttaaaatc cactggctga		
				tggcgggcct tcctttcacc aagttctctt ccttggtgtt ccatgcaatt gactaccact		
				acatctcttc ccagggttc cctatcgaag gctgggctgt tgtgtactac ataaactacc		
				ttttgaaaag ggcgtactc ttcatcaca ttgcactcat tggcactggc tgggctttca		
				ttaagcacat cctttctgat aaagacaaa agatcttcat gattgtcatt ccactccagg		
				tcctggcaaa tgtagcctac atcatcatag agtccaccga ggagggcacg actgaatatg		
				gcttggtgaa ggaactctta tttctggtcg accgtttgtg ttgltgtgct atcctcttc		
				cagtgtgtg gtcaatcaga cattacaag aagcatcagc aacagatgga aaagctgcta		
				ttaacttagc aaagctgaaa cttttcagac attattacgt cttgattgtg tgttacatat		
				acttactag gatcattgca tttctctca aactcgtgt tocatccag tggaaagtgc		
				tctaccagct cctggatgaa acggccacac tggctctctt tgttctaagc gggataaat		
				tccgtccggc ttacagataac cctacctac aactttctca ggaagaagaa gacttgga		

430	45937	KIAA1624 Protein	AAK57695	<p>tggagtcctg tgtgacaaca tctgggggtga tggaaagtat gaagaaagtc aagaaggtga  ccaacggctc cgtggagccc cagggcgagt gggaaaggcg cgtgtgacag agccgacct  gagatggca ctgtccaagg aaactgttaa ctattcata gtctattgg acagcaggag  cagctcctac agtgaactat tggccaccac gacatgaca ccagggcaca tggctggagc  acagtgcgc ggaacactga tttgtactc tctttatgg aaacgatctg tggctgttta  gaggcagctg gatcctcttt caggcgggaa tgggaggcg ggcacaggga ggaggagagg  aagagaaaag gaagaattca ttttaattt aggttctt ttttctct cattcggag  ctctaaggtg tatgcagttg tgaccocatg tgtggggaag ttagcaagg acggtgtgtg  gagggggaag gaggtgcga ggtgtctgtc tgatcttta ggaatgtct actgagacc  ctgggactta agaagaagg cggggagagt gccattgct gtttgggaga caaaatgaa  cgaaaacagg tgactttgga aagcaaatg aaaaaccagt ttaggatgta gcacctgcc  caggattcct gccctcggct ttgccccaga ccttattcc agatgctgag agtgaccagg  acagcagctc ctgaggccca tgggtcttct tccaacagg aagaaggc tgtgatgtcg  ctgtcaggat catgccctgt ggcacagcac agtggtggg agtggtttt ctgactgaga  tgttgcctga tggatgaaa gaaatgtatt ttaagtcca aaagcatta tctgtggcg  ttgcctggac atccactccc tgacagcca gagcagcact gtctggcttc cctcatgct  tgtggtttg ttgtgttga tcagaatttt gggggaatg gaaagtttt ctcaaggagc  agctgggggc agaataagta gtatttaagc aaatacttaa gtccaagcaa atcatccca  ttaaaaagct tttcctgtag gctagttaga aaaaaaaa aaaaaa</p> <p>MAALAPVGSP ASRGPRLAAG LRLPLMLGLL QLLAEPGLGR VHLALKDDV RHKVHLNTFG P  FFKDGIMVNV VSSLNEPE DKDVTIGFSL ERLVQDFSS YLDEVDNYCI LKKQSVSVTL  LILDISRSEV RPKSPPEAGT QLPKIIISRD KTVLQSQEP NVNPSAGNQC TQKTQDGGKS  KRSTVDSKAM GEKSFVHNN QPGLVIFRDI NISTDDQEL YSLYFHKCLG KELPSDKFTF  SLDIEITEKN PDSYLSAGEI PLPKLYISMA FFFFLSGTIW IHLRKRND VFKIHWLMAA  LPFTKSLSV PHAIDYHYS SQGFPIEGWA VVYIITHLLK GALLFITIAL IGTGWAFIKH  ILSDKDKKIF MIVIPLOVLA NVAYIIEST EEGTTEYGLW KDSLFLVDLL CCGAILFPVV  WSIRHLQEAS ATDGKAANL AKLKLFRHY VLVICYIYFT RIIFLLKLA VPFWKWLQ  LLDETATLVE FVLTYKFRP ASDNPYLQLS QEEEDLEMS VVTTSGVMS MKVKKRVNTG  SVEPQGEWEG AV</p>	Homo sapiens
431	50847	Neurotensin Receptor type 2	NM_012344	<p>gagtgaagg gagggagcgc cggccgcggg agcgggatgg aaaccagcag ccgcgcggcc A  ccgcggcca gctccaaacc cgggtgagc ctggacgcc ggctgggctg ggacactcgc  ctctgggcca aggtgctgtt caccgcgtc tacgactca tctgggcgtt gggcgcggcg  ggcaatgcgc tgtccgtgca cgtggtgctg aaggcgcgg cgggcgcctg gggcgcctg  cgccaccacg tgcacagctt ggcgtcgcg ggcctgctgc tgcgtgctg cggcgtgctg  gtggagctct acagcttctg tgggttccac taccctggg tcttcggcga cctggcctgc  cgcggtact acttcgtgca cgagctgctg gcctacgcca cgggtctgag cgtggcaggc  ctgagcgcgc agcgtgctt agcgtgctg cagccctgc gtgccgcag cctgctgacg  ccacgcgga cccggtggct ggtggcgtc tgcgtggcg cctgctcgg cctcgcctg  cccatggcg tcatcatggg gcagaagcac gaactgaga cggcggagcg ggagccggag  ccgcctcgc gagtgtgac ggtgctgtg agccgcac cgtccaagt cttatccag  gtgaatgtgc tgggtctctt cgtgctccc ttggcactaa ctgcttctt gaatggggc</p>	Homo sapiens

432	50847	Neurotensin Receptor type 2	NP_036476.1	<p>           acagtgaacc acctgctggc cctctgctcc caagtgcgt ccaattctac ccggtgcagc            tccaccccca gccgcctgga gctgctgagt gaggagggtc tctcagctt cctcgtatgg            aagaagacct ttatccagg aggcagggtc agctgggtga gacataaaga cgtgcgcggg            atccgcagcc tcacgcgag cgtccagggtt ctcagagcca tctgtgtcat gtatgtcatc            tctggtctgc cgtaccatgc ccgcaggctc atgtactgct agtacctga tgacgcgtgg            actgacccac tgtacaattt ctaccactac ttctacatgg tgaccaaacac actttctac            gtcagctcag ctgtgactcc ttctctctac aacgcctgt cctctcctt cagaaaaac            ttctggaag ccgtcagctc cctgtgtgga gacacacc ccatagaagc gttacccccg            aagccccaga gtccaccct aatggataca gttcaggct ttgggatcc ccagaaaaac            cggacctgaa tgtaatgcaa gaataacag aacaagcaa atgaccagct gcttagtcac            ctggcaaac aggtgagcaa cctcactact aatcattcaa gttcgcagc caggcgact            tctatcaacc cctgctctgc tgagaacct caagcgagg gaagccagct gaccctcct            agctcaggc tccctctgt gtgtagtga gataaagaac agcaccatc tcttagtgtt            gctgagact aaagtgtta gcacagaacc tgggtcgtag tagatgctca ataaatttt            gctggcacg         </p>	<p>           Homo sapiens         </p>
433	53440	G Protein- Coupled Receptor LS53440	AX107037	<p>           cagagaggct gtatttcagt gcagcctgcc agacctctc tggaggaaga ctggacaaag A            ggggtcacac attcctcca tacggttgag cctctacctg cctggtgctg gtcacagttc            agcttctcca tgatggtgga tcccaatggc aatgaatcca gtgtacata ctctaccta            ataggcctcc ctgggttaga agaggctcag ttctggttgg ccttccatt gtgctccctc            taccttattg ctgtgctagg taacttgaca atcatctaca ttgtgcggac tgagcacagc            ctgcatgagc ccatgtatat atttcttgc atgtttcag gcatgacat cctcatctcc            acctcatcca tgcacaaaat gctggccatc ttctggttca attccactac catccagttt            gatgcttgc tgctacagat ttttgccatc cactcctat ctggcatgga atccacagtg            ctgctggcca tggcttttga ccgctatgtg gccatctgtc acccactgag ccatgccaca            gtacttacgt tgctctgtg caccaaaatt ggtgtggctg ctgtggtgag gggggctgca            ctgatggcac ccttctctgt ctctcatcaag cagctgcccc tctgcccctc caatatctt            tccattctct actgcctaca ccaagatgtc atgaagctgg cctgtgatga taccgggtc            aatgtcgtct atggccttat cgtcatcatc tccgccattg gccctggactc acttctcatc            tcttctcat atctgcttat tcttaagact gtgtggggtc tgacacgtga agccaggcc            aaggcatttg gcaattgctg ctctcatgtg tgtgtgtgtg tcatattcta tgtaccttc            attggattgt ccatggtgca tgccttttagc aagcgcgctg acttccgct gcccgctc            ttggccaata tctatctgct ggttctctct ggtctcaacc caattgtcta tggagtgaag            acaaggaga ttgacagcg catccttcga ctcttcctg tggccacaca cgcttcagag            ccctagggtg cagtgatcaa acttcttttc cattcagagt cctctgattc agattttaat         </p>	<p>           Homo sapiens         </p>



434	53440	G Protein- Coupled Receptor LS53440	CAC38935.1	<p>gtaaacattt tggaagacag tattcagaaa aaaaatttcc ttaataaaaa atacaactca  gacccittcaa atatgaaact ggttgggaa tctccatttt tccaatatta ttttcttctt  tgtttcttg ctacataata ttattaatc cctgactagg tctgtgttg agggttatta  cttttcattt taccatgcag tccaaatcta aactgtctct cctgagtggt tacagcattc  tgagataaga atggtacatc tagagacat ttgccaaaag cctaaagcac gcaaaggaaa  ataaacacag aatataataa aatgagataa tctagcttaa aactataact tctcttccag  aactcccaac cacattggat ctacagaaaa tctgtcttc aaaatgactt ctacagagaa  gaaataattt ttctcttgga cactagcact taagggaag attggaagta aagccttgaa  aagagtacat ttacctacgt taatgaaagt tgacacactg tcttgagagt ttccacagca  tatggacctt gtttttctta ttttaatttc ttatcaacc ttttaattagg caaagatatt  attagtaccc tcaattgtgc catgggaaaa ttgatgttca gtgggatca gtgaattaaa  tggtgtcata caagtataaa aattaaaaa aaaaagact tcatgcccc tctcatatga  tgtggaagaa ctgttagaga gaccaacagg gtatgggtt agagatttcc agagtcttac  attttctaga ggaggtattt aatttcttct cactcatcca gtgttgtatt taggaatttc  ctggcaacag aactcatggc ttttaatcca ctagtattg cttattgtcc tgggtccaatt  gccaatatcc tgtgtcttgg aagaagtgt ttctagggtc accattatgg aagattctta  ttcagaaagt ctgcataagg cttatagcaa gtatttatt tttaaaagt ccatagggtga  ttctgatagg cagtgaaggt agggagccac cagttatgat gggaaagtatg gaatggcagg  tcttgaagat aacattggcc ttttgagtgt gactcgtagc tggaaagtga gggaaatcttc  aggaccatgc tttatttggg gctttgtgca gtatggaaca gggactttga gaccaggaaa  gcaatctgac ttaggcattg gaatcaggca ttttctgttc tgagggtcta ttaccaaggg  ttaatagggt tcatcttcaa caggatatga caacagtgtt aaccaagaaa ctcaaatatc  aaatactaaa acatgtgac atatatgtg atatatgtg taagtttcat tttcttttc aatcctcagg  ttccctgata tggattccta taacatgctt tcatccctt ttgtaatgga tatcatattt  ggaaatgctt atttaatact tgtatttgc tctggactgt aagcccatga gggcactgtt  tattattgaa tgtcatctct gttcatcatt gactgctctt tgtcatcat tgaatcccc  agcaaatgac ctagaacata atagtgtta tgcctgacac cgttatattt tcatcaaac  tgattccttc tgtcctgaac acatagccag gcaattttcc agccttctt gagtgggta  ttattaaatt ctggccatta ctccaatgt gactggaagt gacatgtgca atttctatac  ctggctcata aaacctccc atgtgcagcc ttcatgttg acatataatg tgaactggga  agctatgtgt tacacagagt aaatcaccag aagcctggat ttctgaaaaa actgtgcaga  gccaaacctc tgtcatttgc aactcccat tgtatttga cgaggcagtt ggataagtga  aaaaaaagt actatttgt caagaaaaa aaaaaaaa aaaaaaaa aaaaaaaa  aaaaaa</p> <p>MMVDPNGNES SATYFILIGL PGLEEAQFWL APPLCSLYLI AVLGNLTIIY IVRTEHSLHE P  PMYIFLCMLS GIDILISTSS MPKMLAIFWF NSTTIQFDAC LLQMFHLSL SGMESTVILA  MAFDRYVAIC HPLRHATVLT LPRVTKIGVA AVVRGAALMA PLPVFIKQLP FCRSNILSHS  YCLHQDVMKL ACDDIRNVV YGLVITSAI GLDSSLISFS YLLIKTVLG LTREAQAKAF  GTCVSHVCV FIFVPPFGL SMVHRFSKRR DSPLPVILAN IYLLVPPVIN PIVYGVKTK  IRQRIILRLFH VATHASEP</p>	Homo sapiens
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Homo sapiens

P

NP\_005449.1

Gaba (b) Receptor 2

436

54053

gaaaagacca cctacattaa acagaaccac taccaagagc tcaatgacat cctcaacctg  
gaaaacttca ctgagagcac agatggagga aaggccattt taaaaaatca cctcgatcaa  
aatccccagc tacagtggaa cacaacagag ccctctcgaa catgcaaga tcctatagaa  
gatataaact ctcagaaca catccagcgt cggctgtccc tcagctccc catcctccac  
cacgctacc tccatccat cggagcggtg gacgcagct gtgtcagccc ctgctcagc  
cccaccgcca gccccgcca cagacatgtg ccaccctct tccgagtcac gtctcgggc  
ctgtaa

MASRRSGQP GRPPPPPPPP ARLLLLLLP LLLPLAPGAW GARGAPRPP PSSPPLSIMG  
IMPLTKEVAK GSGRGVLP VELAIEQIRN ESLLRPYFLD LRLYTECDN AKGLKAFYDA  
IKYGNHLMV FGVCPSTVS IIAESLQWN LVQLSFAATT PVLADKKYP YFFRTVPSDN  
AVNPAILKLL KHYQWKRVT LTQDVQRESE VRNDLTGVLY GEDIEISDTE SFSNDPCTSV  
KKLKGNDVRI ILGQFDQNM AKVFCAYEE NMYGSKYQWI IPGWYEPSWW EQVHTEANSS  
RCLRNLLAA MEGYIGVDFE PLSSQIKTI SGKTPQYER EYNNKRSVG PSKFHGYAYD  
GIWVIKTLQ RAMETLHASS RHQRIQDFNY TDHTLGRILL NAMNETNFFG VTGQVFRNG  
ERMGTIKFTQ FQDSREVKVG EYNAVADTLE IINDTIRFQG SEPPKDKTII LEQLRKISLP  
LYSILSALT I LGIMASAFI FFNIXNRNQK LKIMSSPYMN NLIILGMLS YASIFLFLGLD  
GSFVSEKTFE TLCTVRTWIL TVGYTAFGA MFAKTWRVHA IFKNVMMKKK IIKDQKLLVI  
VGGMLLIDLC ILLICQAVDP LRRTVEKYSM EPDPAGRDIS IRPLEHCEN THMTIWLIV  
YAYKGLMLF GCFLAWETRN VSIPALNDSK YIGMSVYVNG IMCIIGAASV FLTRDQPNVQ  
FCIVALVIEF CSTITLCLVF VPKLITLFTN PDAATQNRRE QFTQNKKEK SKTSTSVTSV  
NQASTSRLEG LQSENHRLRM KITELDKLE EVMQKQDTP EKTYYIKQNH YQELNDILNL  
GNFTESDGG KAILKNHLDQ NPQLQWNTTE PSRTCKDPIE DINSPEHIQR RLSLQLPLIH  
HAYLPSIGGV DASCVSPCVS PTASPRHRHV PPSFRVMVSG L

Homo sapiens

A

NM\_022159

ETL protein

437

55728

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444	73584	Cadherin EGF NP_055061.1 LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flam ingo)	cagtgccgac ccgtggctgg cagcccgggc agtcctttgc aaaggcacc cttgtcttaa aatcacttcg ctatgtgga aagtgagaga tacttttata tattgtatg ggactctgag gagtgcaac ctgtatatat attgcattcg tgctgacttt gttatcccg gagatccatg caatgatctc ttgctgtctt ctctgtcaag attgcacagt tgtacttgaa tctggcatgt gttgacgaaa ctgggtgccc agcagatcaa aggtgggaaa tacgtcagca gtggggctaa aaccaagcgg ctagaagccc tacagtgc ccctggccagg aagtgaaggat ggtgtgggcc ctcccccg gccccctggg tccccagtgt tcgctgtgtg tgcgtttgtc ctctgctgcc atctgcccc gctgtgtgaa ttcaagacag ggcagtgcag cactaggcag gtgtgaggag ccctgctgag gtcactgtgg ggcacggttg ccacacggt gtcatctttc acctggtcat tctgtgacca ccacccctc ccctcacgc ctcccaggtg gccggggagc tgcaggtggg gatggctttg tctttgtctc ctgctcccc gggacacctg gaccttaaa cgttgcaggt tcttgatttg gacagaggtg tggggccctc caggccgtta catactctc gccaatctc taactctcg agactgcgag gatctccagg cagggttctc ccctctggag tctgaccaat tactcattt tcttcaaat ggcacatgt gcagagggac aagccacag ccacactctt caacggttac caaactgttt ttggaattc acaccaaggt cgggccact gcaggcagct ggcacagct gggccgaggg gctgtggaac ggtccccga actgtcagac atgtttgatt ttagcgttc cttgttctt caaatcaggt gcccaataa gtgatcagca cagctgcttc caaataggag aaaccataa ataggatgaa aatcaagtaa atgcaaaaga tgtccacact gttttaact tgacctgat gaaaatgtga gcactgttag cagatgccta tgggagagga aaagcgtatc tgaaaatggt ccaggacagg aggatgaaat gagatcccg agtccctaca cctgaatgaa ttatacatgt gcttacag gtgagtggtc ttctgaagat aaaaaactc agtccttca aacgtttgct cctggcggtt cctaagtacg aaaagggttt taagtcttcg aacagtcctc ttcatgact ttaacaggt tctgccccct caggtgtaat tttttgttc tattttttc cactactcc acagccaaca tcacgaggtg taatttttaa ttgatcaga actgttacca aaaaacaact gtcagtttta ttgagatggg aaaaatgtaa acctatttt attacttaag actttatgg agagattaga cactggaggt ttttaacaga acgtgtattt attaatgttc aaaaactgg aattacaaat gagaagagtc tacaataaat taagattttt gaatttgtag ttctgcggtg ctggtttttc tccacaaaca ccccgcccc tccccatgcc caggtggcc gtggaaggga cggtttacgg acgtgcagct gagctgtccg tgtcccatgc tccctcagcc agtggaacgt gccggaact ttgtccatt cctagtagg cctgccacag cctagatggg cagtttttgt ctttcccaa atttgaggac ttttttttt tgcattatt tcttcagttt tctttcttg cactgatctt tctcctctc tctgtgact ccagtgactc agacgttaga cctcttgatg ttttccact ggtccctgag gctctgttc MAPPPPPVLP VLLLLAAAA LPAMGLRAA WEPVPVGGTR AFALRPGCTY AVGAACPRA P PRELLDVGRD GRLAGRRVS GAGRPLQV RLVARSAFTA LSRRLRARTH LPCCGARARL CGTGARLCA LCFVPVGGCA AAQHSALAAP TTLPACRCP RPRPCGRP ICLPPGGSVR LRLICALRA AGAVRVGLAL EAATAGTPSA SPSPSPPLPP NLPEARAGPA RRARRGTSGR GSLKFFMPNY QVALFENEP A GTLILQLHAH YTIEGEERV SYNMEGLFDE RSRGYFRIDS ATGAVSTDSV LDRETKETHV LRKAVDYST PRSATYIT VLKVDNDHS PVFEQSEYRE RVRENLEVG EVLTIRASDR DSPINANLRY RVLGAWDVF QLNESGWSV TRAVLDREEA AEYQLLVEAN DQGRNPGLS ATATVYIEVE DENDNYPQFS EQNYVVQVPE DVGLNTAVLR	Homo sapiens
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VQATDRDQGO NAAIHYSILS GNVAGQFYLH SLSGILDVIN PLDFEDVQKY SLSIKAQDGG  
RPPLINSSGV VSVQVLDVND NEPIFVSSPF QATVLENVPL GYPVHHQAV DADSGENARL  
HYRLVDTAST FLGGGSAGPK NPAPTDPFPE QIHNSSGWIT VCAELDREEV EHYSGVEAV  
DHGSPPMSSS TSVSITVLDV NDNDPVFTQP TYELRLNEDA AVGSVLTLQ ARDRDANSVI  
TYQLTGGNTR NREALSSQRG GGLITLALPL DYKQEQYVL AVTASDGTRS HTAHLINVT  
DANTHRPVFQ SSHYTVSVE DRPVGTISIAT LKSDTTITLE LILDANDNAP PVPQFRIDPD  
SGTMYTMMEL DYENQVAYTL TMAQDNGIP QSDTTITLE LILDANDNAP PVPQFRIDPD  
IFEDAPPSTS ILQVSATDRD SGPNGRLTYT FQGGDDGDG FYIEPTSGVI RTQRLDREN  
VAVYNLWALA VDRGSPTPLS ASVEIQVTIL DINDNAPMFE KDELELFVEE NNFVGSVVAK  
IRANDPDEGP NAQIMYQIVE GDMRHHFQLD LINGDLRAMV ELDFEVREY VLVQATSAP  
LVSRATVHIL LVDQNDNPPV LPDFQILFNN YVTNKSNSFP TGVTGICPAH DPDVSDSLNY  
TFVQGNELRL LLLDPATGEL QLSRDLNDR PLEALMEVS SDGIHSVTAF CTRVTLITD  
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TNGQCCKEN YYKLLAQDTC LPCDCFPHS HSRTCMTATG QCACKPGVIG RQNCRCNPF  
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LFNCTTISFV DLRAMNEKLS RNETQVDGAR ALQLVRALRS ATQHTGTLEF NDVRTAYQLL  
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VSFPADFFRP PEEKEGPLL R PAGRRTPQT TRPGPGTERE APISRRRHP DDAGQFAVAL  
VIYRTLGQL LPERYDPPDR SLRLPHRPII NTPMVSTIVY SEGAPLPRPL ERPLVEFAL  
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ENGEVLPLKI VTYAAVSLSL AALLVAFVLL SLVRMLRSNL HSIHKLAVA LFLSQLVFI  
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KHYYGKKGI VSILRTAFLI LLLISATWLL GLLAVNRDAL SFHYLFAIFS GLQGFVLLF  
HCVLNQEVK HLKGVLGGRK LHLEDSATPR ATLLTRSLNC NTFDGDGPD LRTDLGESTA  
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ASSHSSDSED DGVGAEEKWD PARGAVHSTP KGDAVANHP AGWPDQSLAE SDSEDPGKPK  
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445	74514	5-HT5A Receptor	NM_024012	<p>LTEQTLKGRLL REKLADCEQS PTSSRTSSLG SGGPDCAITV KSPGREPGRD HINGVAMNVR</p> <p>TGSAQADGSD SEKP</p> <p>atggattttac cagtgaacct aacctctttt tccctctcca cccctctccc ttggagagacc A</p> <p>aaccacagcc tcggcaaga cgacctgcgc ccagctgcgc cctgtctctc ggtcttcgga</p> <p>gtgcttattc tcaccttgtt ggcctttctg gtgcgcgcga cgttgccttg gaacctgctg</p> <p>gtgctggcga ccacctctcg tgtacgcacc tccaccgcgc tgcccacaa cctggtggca</p> <p>tccatggccg tctcgatgt cctggtggcc gcctgtgtca tgcctgtgag cctggtgcat</p> <p>gagctgtccg ggcgcgcgtg gcagctaggt cggaggtgtt gccagctttg gacgcgtgc</p> <p>gacgtgcttt gctgcacggc cagcatcttg aacgtgacgg ccatagcctt ggacgcgtac</p> <p>tggctccatca cgcgccacat ggaatacacg ctccgcaccc gcaagtgcgt ctccaaacgtc</p> <p>atgatcgccg tcacctgggc actctccgt gtcatctctc tggccccgt gctttttggc</p> <p>tggggagaga cgtactctga gggcagcgag gactgccag taagccgcga gccctccctac</p> <p>gccgtgttct ccaccgtag cgcctctctc ctgcccgtct gtgtgtgtct cttcgtgtac</p> <p>tggagatctt acaaggctgc caagtctgc tctggctcca ggaagaccaa tagcgtctca</p> <p>cccatatccg aagctgtgga ggtgaaggac tctgccaaac agccccagat ggtgttcacg</p> <p>gtccgcccag ccacogtcac cttccagcca gaaggggaca cgtggcgagg gcagaaggag</p> <p>cagcgggccg cctcatggt gggcatctc attggcgtgt tctgtctctg ctggatcccc</p> <p>ttctttctca ccgagctcat cagtcctctc tgcctctgtg acatccccgc catctggaaa</p> <p>agcatcttcc tgtggcttgg ctactccaac tcttcttta acccctgat ctatacggct</p> <p>ttcaacaaga actacaacag cgccttcaag aactctttt ctaggcaaca ctga</p>	Homo sapiens
446	74514	5-HT5A Receptor	NP_076917.1	<p>MDLPVNLTSE SLSTPSPLET NLSGKDDLRL ALVMPLSLVH ELSGRWQLG VRLCQLWLAC P</p> <p>VLATILRVRT FHRVPHNLVA SMAVSDVIVA LRTRKCVSNV MIALTWALSA VISLAPLIFG</p> <p>WGCTYSEGE ECQVSREPSY AVFSTVGAFY LPLCVLFVY WKIYKAAKFR VGSRTKNSVS</p> <p>PISEAVEVKD SAKQPQMVFT VRHATVTFQP EGDWREQKE QRAALMVGIL IGVFVLCWIP</p> <p>FFLTELISPL CSCDIPAIWK SIFLWLGYSN SFFNPLIYTA FNKNYNSAFK NFFSRQH</p> <p>gtaatgcaga gataataaaa cttcttaggt ccatagtct tataataatt taataaccta A</p> <p>aacatggtat acaaatctct ccaaacccaa taacataatt atagtittca aaagtctccc</p> <p>aaactttcaa gttagatttt attgctttga tgatggctt taatatgaa aagtcttgcc</p> <p>tgtgaaggcc aatccttttc cgtggactg ggaatctag aaatacagaa atgtgcccag</p> <p>gggttcattc cctaataac catcattcac atttctcaac ctccctaata accagcccac</p> <p>atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt</p> <p>cagtggagtt ggttgcaacc tgatgctaag gatgtcaaa ttgtctcggc ctctgttccc</p> <p>agccagtaag taattccctg gcccgggcc ataccctca atcttggtca gctgattatg</p> <p>acaggcagac agcacagtaa ataacatat atattaagaa aacccaaagc atatgtatca</p> <p>atggtatata cccaacagca tcctaggaat ggagagtctg tagcaagggc ctccaatgtg</p> <p>aaggtcaaca cagtcactgt gatgcgtgta ttccatttt gtaagcatg atctctggtg</p> <p>gtcattttta tcttctaac ttattggaaa agtctcctgt ttggggggcc cgccccgtgt</p> <p>cacagccaga ctgactcagt ttccctggga ggtcccgctg gagccgtcc ttccccccc</p> <p>tctgccccgc cccagccctc gccccacct cggcgccgc acatctgctt gctcagctcc</p> <p>agacggcgcc cggacccccg ggcgcgggat ccagccaggt gggagccccg cagatgaggt</p>	Homo sapiens
447	81765	Thromboxane A2 Receptor	NM_001060		Homo sapiens

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448 81765 Thromboxane NP\_001051.1 MWPNGSSLGP CFPRTNITL ERRLIASPFW AASFVUGLA SNLLALSILA GARQGGSHTR P Homo  
A2 Receptor LLGAAMASER YLGITRPFSS PAVASQRRW ATVGLVWAAA LALGLPLLG VGRYTVQYPG sapiens  
SWCFLTLGAE SGDVAFLLF SMLGSLVGL SFLINTVSA TLCHVYHGQE AAQQRPRDSE  
VEMMAQLLGI MVASVCWLP LLVFIQTVL RNPPAMSPAG QLSRTTEKEL LIYLRVATWN  
QILDPMVYIL FRAVLRLRQ PRLSTRPRL SLQPLTQRS GLQ

449	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	(C NM_005283	atggagtcct caggcaaccc agagagcacc agctttttt acccttgcca ccactgtcct tcatgacctg	Homo sapiens
				ccgtgtgaga accagcctg ggtctttgt acccttgcca ccactgtcct tcatgacctg	
				gtgtttctcc tcagctagt gggcaacagc ctggtcctgt ggttctgtt gaagtatgag	
				agcctggagt cctcaccacaa catcttcac tcacacctgt gctctcaga cctggtgttc	
				gctgtctgt tgcctgtgtg gatctccca taccacctgg gctggtgtt gggagacttc	
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				accatcatga ccatccaccg ctacctctg gtagtgagcc cctctccac cctgctgctc	
				ccacccctcc gctgcgggt gctgtgacc atggtgtgt ggttagccag catcctgtcc	
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				acgtggtacc tcacctccgt ctaccagcac aacctcttct tctgtgttc cctgggatt	
				atcctgttct gctacgtgga gatcctcagg accctgttcc gctcagctc caagcggcgc	
				caccgcacgg tcaagtcct ctccgccatc gtggtggcct acttctcag ctgggtctcc	
				tacaaactca cctgtttct gcagacgttg ttccggaccc agatcatccg gagctgcgag	
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				tgctttaacc cgggtctcta tgtcttcgtg ggggtcaagt tccgacaca cctgaaacat	
				gttctccggc agttctgtgt ctgccggctg caggcaccca gccagcctc gatccccac	
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450	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	(C NP_005274.1	MESSGNPEST TFFYYDLQSQ PCENQAVFA TLATTVLYCL VFLLSILVNS LVLWLVKYE P	Homo sapiens
				SLESNTNIFI LNLCLDLVF ACLLPVWISP YHGMVGLGDF LCKLINMIFS ISLYSSIFFL	
				TIMTHRYLS VVSLSTLRV PTLRCRVLVT MAVWVASILS SILDTFHKV LSSGCDYSEL	
				TWYLTSVYQH NLFLLSLGI ILFCYVEILR TLFERSKRRR HRTVKLIFAI VWAYFLSWGP	
				YNFTLFIQTL FRTQIIRSC EAKQLEYALL ICRNLAFSHC CFNPVLYVFEV GVKFRTLKH	
				VLRFQWFCRL QAPSPASIPH SPGAFAYEGA SFY	
451	130108	G Protein-Coupled Receptor 1 GPR75	(NM_006794	gcgatggcga tcatgctct agtctgcat catccagagc ggcagcgag ctggggctcg	Homo sapiens
				gactgcgaga tggaggagg ggcgctgctg gcacccggca ggttatctg tcttggcct	
				cttttctcac atattgctca tctgtgagct gaggccctga ctcatgagt attttgggg	
				agcagaagaa ggagacattt ctctccgaaa atgaactcaa caggccacct tcaggatgcc	
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				ttcaccttct gtgtgtgtgt ggtctctgtc ttatataca tgattgtcta gacctgcgg	
				aagaacgctc aagtcagaaa gtgccccctt gtaatacag tcatgtcttc cagaccacag	
				cctttcatgg ggtccctgt gcaggagggt ggagatccca tccagtgtgc catgcccgt	
				ctgtatagga accagaatta caaaaaactg cagcacgttc agacctgtg atataccaag	

452	130108 G Protein-Coupled Receptor GPR75	NP_006785.1	<p>           agtcccaacc aactgggtcac cctcgagca agccgactcc agctcgtatc agccatcaac            ctctccactg ccaaggattc caaagccgtg gtcacactgtg tgatcattgt gctgtcagtc            ctggtgtgct gtcttcact ggggatttcc ttggtacagg tgggtctctc cagcaatggg            agcttcattc ttaccagtt tgaattggtt gcagggtgga gaagaaagt gctctgggtgc            ttaaaccctt ttatatattc tcggaacagt gcagggtgga gaagaaagt gctctgggtgc            ctccaataca taggcctggg ttttttctgc tcaaacaaa agactcgact tcgagccact            gaaaaaggga acctcgaaagt caacagaaac aaatcctccc atcatgaaac aaactctgcc            tacatgttat ctccaaagcc acagaagaaa tttgtggacc aggcctgtgg cccaagtcat            tcaaaagaaa gtatggtgag tcccaagatc tctgctggac atcaacactg tggtcagagc            agctcgacc ccataaacac tcggattgaa ccttactaca gcatctataa cagcagccct            tcccaggagg agagcagccc atgtaactta cagccagtaa actcttttgg atttgccaat            tcatatattg ccatgcatta tcacaccact aatgacttag tgcaggaata tgacagcact            tcagccaagc agattccagt cccctccgt taaagtcagt gaggtatag gatcttatgt            aaacagtttt tgtttctgat agtaattggac ttattcttaa cttgagatca gtggcggatc            aaaacctaca agattcaact gaaaagtgg cagttatggt tttctttcat ctgatgtgtc            agtatctgtt gatttgcctt gtagtttgtt gacatcttaa gattgatgt gaaagtgtta            gattttttac cctg         </p>	Homo sapiens
453	133117 G Protein-Coupled Receptor RAIG1	NM_003979	<p>           MNSTGHLQDA PNATSLHVPH SQEGNSTSLQ EGLQDLIHTA TLVTCFLLA VFCLGSYGN P            FIVELSFDDP APRKFRTNFD FMILNLSFCD LFICGVTPM FTFVLFSSA SSIPDAFCFT            FHLTSSGFII MSIKTVAVIA LHRLRMVLGK QPNRTASFPC TVLLTLILWA TSFTLATLAT            LKTSKSHLCL PMSLSIAGVG KAILSXYVD FTRCVAVNSV SYIMIAQTLR KNAQVRKCPP            VITVDASRPQ FPMGVPVQGG GDPICQAMPA LYRNQYGNKL QHVQTRGYTK SPNQLVTPAA            SRLQLVSNP LSTAKDSKAV VTCVILVLSV LVCCPLGIS LVQVVLSSNG SFILYQFELF            GFTLIFFKSG LNPFIYSRNS AGLRRKVLWC LQYIGLGFFC CKQKTRLRAM GKGNLEVNRN            KSSHETNSA YMLSPKPQKK FVDQACGSPH SKESMVSPKI SAGHQCQGS SSTPINTRIE            PYYSIYNSSP SQEESSPCNL QPVNSFGFAN SYIAMHYHTT NDLVQEYDST SAKQIPVPSV            ataacagcat gaagtgcctg ggaactggaa taggcgtgtc ctctccctcg accctcccc A            tccttgctcc tctgctcacc cctcgctcgt tccctccctc cggcgagggc cgcctttata            acaactgctc agagtgcgag ggcgggatat cgtgtccaag tctccccag cactgaggag            ctgcctgct gccctcttgc gcgcgggaag cagcaccaag ttcaaggcca acgccttggc            actagggtcc agaattgcta caacagtcctc tgatggttgc cgaatggcc tgaatccaa            gtactacaga ctttgtgata agcctgaagc ttggggcctc gtctagaaa cgggtggccc            agccggggtt gtgacctcgg tggccttcac gctcactctc ccgactcctg tctgcaaggt            gcaggactcc aacaggcgaa aaatgctgcc tactcagttt ctctcctcc tgggtgtgtt            gggcatcttt ggctcacct tcgcttcac catcgagctg gacgggagca cagggccac            acgctcttc ctctttggga tcccttttc catctgttc tctgctcgc tggctcatgc            tgtcagtcctg accaagctcg tccgggggag gaagccctt tccctgttgg tgattctggg            tctggccgtg ggcttcagcc tagtccagga tgttatcgt attgaatata ttgtcctgac            catgaatagg accaagctca atgtctttc tgagctttcc gctcctcgtc gcaatgaaga            ctttgtcctc ctgctcacct acgtcctctt cttagtgagc ctgaccttcc tcatgtctc            cttcaccttc tgtggttctt tcacgggctg gaagagacat gggggccaca tctacctcac         </p>	Homo sapiens



Accession	Gene	Protein	Protein ID	Protein Name	Species
454	133117	G Protein-Coupled Receptor RAIG1	NP_003970.1	<p>gatgtctctc tccattgcc tctgggtggc ctggatcacc ctgtctatgc ttctgacttt</p> <p>tgaccgcagg tgggatgaca ccatctctcag ctccgcttg gctgccaatg gctgggtgtt</p> <p>cctgttggt tatgttagtc ccgagttttg gctgctaca aagcaacgaa acccatgga</p> <p>ttatctgtt gaggatgctt tctgtaaacc tcaactcgtg aagaagagct atggtgtgga</p> <p>gaacagagcc tacttcaag aggaatcac attttcagct gcagaaaccag gggacacgct</p> <p>ctatgcccc tattccacac attttcagct gcagaaaccag cctcccaaa aggaattctc</p> <p>catccacagg gccacgctt ggcgagccc ttacaaagac tatgaagtaa agaaagaggg</p> <p>cagctaaatc tgtctgaag agtgggacaa atgcagccgg gcggcagatc tagcgggagc</p> <p>tcaaaaggat gtggcgaaa tcttgagtct tctgagaaa ctgtacaaga cactacggga</p> <p>acagtttggc tccctccag cctcaaccac aattcttcca tgtggtggct gatgtgggct</p> <p>aglaagactc cagttcttag aggcgctgta gtattttttt ttttttgtct catcctttgg</p> <p>atactcttt taagtgggag tctcaggcaa ctcaagttaa gacccttact cttttgttt</p> <p>gttttttga acaggatctt gctctgtcac ccaggcttga gtgcagtgtt gogatcacag</p> <p>cccagtgcag cctcgaccac ctgtgttcaa gcaatctctc catctccatc tcccaagtgt</p> <p>ctgggatgac aggcgtgagc cacagctccc agcctaggcc cttaattctt ctgtattttt</p> <p>ccatggacta aaggtctggt catctgagct cagctgggt cacaagctc taggggcctg</p> <p>ctcctctaac tcacagtggg ttttgtgagg ctctgtggc cagagcagac ctgcatactc</p> <p>gagcaaaaat agcaaaagcc tctctcagcc caaccttct tgccctggta ggagaggcta aagatcaccc</p> <p>ttgtctggac cccgctccc caaccttct gtgctgctc acattgggc tcagcagctc cccagcacca</p> <p>taaatattact catctctcta tctctgact ttcttgact gtcccaaac ttgctgtcaa ttcgagata</p> <p>attcacaggt caccctctc ctacgctctg ccaggaattc tagatcattc tctctgagc agcccggttg</p> <p>taatctcccc ctacgctctg ggagaatttg tagatcattc tcaattcaaa tctctgggc tgatactct</p> <p>ctccttgta ggagaatttg aggaatttg tagatcattc tcaattcaaa tctctgggc tgatactct</p> <p>ctcatcttgc acccaacct ctgtaaaatg atttacgca tttaaggctg catctgttaa</p> <p>gtgggcatgg tctctaatg gagagtggt catgtataa taagttattc acctgagtat</p> <p>gcaataaaga tgtgtgtggc actctttcat ggtggtggca gcaaaaaaaa aaaaaa</p> <p>RRKMLPTQFL FLGLVIGIFG LTFAFIIGLD GSTGTRFEL FGLFSICFS CLLAHAVSLT</p> <p>KLVRGRKPLS LLVILGLAVG FSLVQDVIAI EYIVLTMTNT NVNVELSA PRNEDFVLL</p> <p>LTYYLFLMAL TFLMSFTFC GSFTGWKRHG AHIVLTMLLS IAIWVAWITL LMLPDEFRRW</p> <p>DDTILSSALA ANGWVFLLAY VSPEFWLLTK QRNPMDYPVE DAFCKPQLVK KSYGVENRAY</p> <p>SQEITQGEF ETGDTLYAPY STHFQLQNP PQKEFSIPRA HAMWSPYKDY EVKKEGS</p>	Homo sapiens
455	152198	Tachykinin Receptor 2	NM_001057	<p>atggggacct gtgacattgt gactgaagcc aatatctcat ctggccctga gagcaacacc A</p> <p>acgggcatca cagccttctc catgcccagc tggcagctgg cactgtgggc accagctac</p> <p>ctggccctgg tgcgtgtggc cgtgacgggt aatgccatcg tcaatctggat catcctggcc</p> <p>catcgaggga tgcgcacagt caccaactac ttcctcgtca atctggcgt ggtgacctc</p> <p>tgcatggctg ccttcaatgc cgccttcaac ttgtctatg ccagccacaa catctggtac</p> <p>tttggccctg ccttctgcta ctctccgaac ctcttcccc tcaacagcat gtttgtcagc</p> <p>atctactcca tgaccgcat tgctgcgac aggtacatgg ccatcgctca cccctccag</p> <p>cctgggcttt cagctcccag caccaaggcg gttattgctg gcatctggct ggtggctctc</p> <p>gcctggcct cccctcagt ctctactcc accgtcacca tggaccaggg tgcaccaag</p>	Homo sapiens

Homo  
sapiens

P

152198 Tachykinin  
Receptor 2 NP\_001048.1

456

tgctgtgtg cctggcccg agacagcggg ggcaagagcg tctctctgta ccactcgtg  
 gtgatcgcc tcatctactt cctgcgctc gcggtgatgt ttgtagccta cagcgtcatc  
 ggcctcagc tctggaggcg cgcagtgcgc ggacatcagg cgcacgggtg caacctcgc  
 catctgcagg ccaagaagaa gtttgtgaag accatgggtg tgggtgtgct gacgtttgcc  
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 acgacctcc tctccagag agtcaacagg tgtcacacta aggagacttt gttcatggct  
 ggggacacag cccctccga ggtaccagt ggggaggcgg ggcgtcccca ggatggatca  
 gggctatggt ttgggtatgg ttgtctgccc ccacacaaa ctcatgttga aattga  
 MGTCDIVTEA NISSGPESNT TGITAFSMPs WQLALWAPAY LALVLVAVTG NAIVIIILA  
 HRRMRTVTNY FIVNLALADL CMAAFNAFN FVYASHNIWY FGRACYFQN LFPITAMFVS  
 IYSMTAIAAD RYMAIVHPFQ PRLSAPSTKA VIAGIWLVAL ALASPQCFYS TVTMDQGATK  
 CVWAWPEDSG KTLILLYHLV VIALIYFLPL AMFVAYSVI GLTLWRRVAVP GHQAHGANLR  
 HLQAKKKFVK TMVLVLTFA ICWLPYHLYF ILGSFQEDIV CHKFIQQVYL ALFWLAMSST  
 MYNPIIYCCL NHRFRSGFRL AFRCCPWVTP TKEDKLELTP TTSLSTRVNR CHTKETLFMA  
 GDTAPSEATS GEAGRPQDGS GLWFGYGLLA PTKTHVEI  
 ccgctcccg gtctctttt ggcctgggtt aaccgaggt gcagagctga gaatgaggcg A  
 atttcggagg atggagaaat agccccaggt cccgtggaaa atgaggccgg cggacttgct  
 gcagctgggt ctgctgctcg acctgccag accctggcctt ggaatgggtt gttcgtctcc  
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 caccatatgt ggggacagtg aagacatggt gtgtaccccc aagtcagatg agttcaaccc  
 gtgtgaagac ataattgggt acaagtctct gagaattgtg gtgtgggttcg ttagtctgct

Homo  
sapiens

A

152201 Thyrotropin  
Receptor NM\_000369

457

458	152201	Thyrotropin Receptor	NP_000360.1	<p> ggctctcctg ggcaaatgtct ttgtctctgct tattctctc accagccact acaaaactgaa  cgccccgc tttctcatgt gcaacctggc ctttgcggat ctttgcggat ggatgtacct  gctctcctc gctctgtag acctctacac tcaactctgag tactacaacc atgccatega  ctggcagaca ggccctgggt gcaacacggc tgggtctctc actgtctttg caagcgagtt  atcggtgtat acgctgacgg tcaatccct ggagcgctgg tatgccatca ccttgcctat  gcgctggac cgggaagatcc gcctcagca atcatgtgtg gggcgctgggt  ttgtgcttc cttctgccc tgcttcttt ggtgggaata agtagctatg ccaaagtcag  tatctgctg cccatggaca ccgagacccc tcttgcctg gcataattg ttttgttct  gacgtcaac atagtgtcct tctgtcctg ctgtctgtg catgtgaaga tctacatcac  agtcgaaat ccgagtaga acccaggga caaagatacc aaaaattgcca agaggatggc  tgtgttgatc ttaccgact tcaatgcat ggcaccaatc tcaattctatg ctctgtcagc  aattctgaac aagcctctca tcaactgttag caactccaaa atcttctgtg tactcttca  tccacttaac tctgtgcca atccattctt ctatgtatt ttcaaccaagg ccttccagag  ggatgtgttc atctactca gcaagtttgg catctgtaaa cggcaggctc aggcataccg  gggagcaggg gtctctcaa agaacagcac tgatatctag gttcaaaaagg ttaccacaga  catgagcgag ggtctccaca acatgggaaga tgtctatgaa actcccatct  aaccctaaag aagcaaggcc aaatctcaga agagtatatg caaacgggtt tgtaagttaa  cactacacta ctcaaatgg taggggaact taaaaataa tagtttcttg aatatgcatt  ccaatcccat </p>	Homo sapiens
459	152245	C-C Chemokine Receptor 2	NM_000648	<p> MRPADLLQLV LLLDLPRDLG GMGSSPPCE CHQEDFRVT CKDIQIPSL PPSTQTLKLI P  ETHLRTIPSH AFSNLPNISR IYVSIDVTLQ QLESHSFYNL SKVTHIEIRN TRNLTYIDPD  ALKELPLLKF LGFNTGLKM FPDLTGVYST DIFFILEITD NPYMTSIPVN AFQGLCNETL  TLKLYNNGFT SVQYAFNGT KLDAYLNKN KKLPLSLSL FLTRADLSYP SHCCAFKNQK KIRGILESLM  LPSKGLEHLK ELIARNTWTL KKLPLSLSL FLTRADLSYP SHCCAFKNQK KIRGILESLM  CNESMQSLR QRKSVNALNS PLHQEYENL GDSIVGYKEK SKFQDTHNNA HYYVFFEEQE  DEIIGFQEL KNPQETLQA FDSDYDITC GDSIVGYKEK SKFQDTHNNA HYYVFFEEQE  VWFVSLALL GNVFVLLILL TSHYKLVPR FLMCNLAFAD FCMGMVLLI ASVDLYTHSE  YNNHAIDWQT GPGCNTAGFF TVFASELSVY TLTVTILRW YAITFAMRLD RKIRLRHACA  IMVGGWVCCF LLALLPLVGI SSYAKVSICL PMDTETPLAL AYIVFVLTIN IVAFVIVCCC  HVKIYITVRN PQYNPGDKDT KIARMAVLI FTDICMAPI SFYALSAILN KPLITVSNK  ILLVLFYPLN SCANPFLYAI FTKAFQDVF ILLSKFGICK ROQAAYRGQR VPPKNSTDIQ  VQKVTHDMRQ GLHNMEDVYE LIENSHLTPK KQGQISEEYM QTVL  caggactgcc tgagacaagc cacaagctga acagagaaag tggattgaac aaggacgcac A  ttccccagta catccacaac atgctgtcca catctcgttc tcggtttatc agaaatacca  acgagagcgg tgaagaagtc accaccttt ttgattatga ttacgttgct cctgtcata  aatttgacgt gaagcaaat ggggcccac tctcgtctcc gctctactcg ctggtgttca  tcttgggtt tgtgggcaac atgctggtcg tccatcatct aataaactgc aaaaagctga  agtgtttgac tgacatttac ctgctcaacc tggccatctt tgatctgctt ttcttatta  ctctcccat gtgggctcac tctgctgcaa atgattgggt ctttgggaat gcaatgtgca  aattattcac agggctgtat cacatcggtt atttggcgg aatctcttc atcatcctcc  tgacaatcga tagatacctg gctattgtcc atgctgtgtt tgctttaaaa gccaggacgg </p>	Homo sapiens

460	152245 C-C	NP_000639.1	Chemokine Receptor 2	MLVLLILINC KKLKCLTDIY LLNLAISDLL FLITLPLWAH SAANEWVFN AMCKLFTGLY HIGYFGGIF ILLTIDRYL AIVHAVFALK ARTVTFGVVT SVITWLVAVF ASVPGIIFTK CQKEDSVYVC GPYFPRGWN EHTIMRNILG IVILINTFQE FFGLSNCEST SQLDQATQVT ETLGMTHCCI AVRVIPTIMI VYFLFWTPYN KFRYLSVFF RKHITKRFEK QCPVFYRETV DGVSTNTPS TGEQEVSAAGL NP1IYAFVGE KAGAAATCCT CAGGTCCCAC AGAATGAAC AGTFTTCTA AAATAAAGTC AAGCCAAGCT A GTCCTACCCC AAAGAAATC CTAGCAAGCA AAGTGGCTT CCTTCTGTAG GCCCCAGCCA GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGATCAGAG TGACITAAACA GTTAGAGGGC ACTTGATGAG TAAGGTGAAA TAGGGAAC TAGGTGAGAG AAGTCAAGG ATCAGACT TGTGATTAGA AACCATGTCT ACATCTGGAG AGAACAGTT AAGTCAAGG ATCAGACT TGTGATTAGA GACTGCCAGG GTCCATATGA CCAAGCGGG GTCCAGGTG TGAAGCTGGG GTTGAGGATC CATTATCTGA ATTTTCCACT CTATGGATGA TCACTTTTAT TCTTTTCTT TCTTTGAAT TATTTCCATT TGTATTATCC TAAATTCCT GGTAGATCAC CTGTGAAGC TTGCAACTGT CTGATARGAA TAAAGGGGGA AGGATTTGAC TTTACAGAG AGACTTCAGA AGAGTCTC TCTAGGAGCA AATTGGGGG AATCCAGTGG GAAGAGGTG GAAGACTGCA CTTGAGCTGC GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT	Homo sapiens
461	152299 Interleukin- 8 Receptor A	LG5459		MLVLLILINC KKLKCLTDIY LLNLAISDLL FLITLPLWAH SAANEWVFN AMCKLFTGLY HIGYFGGIF ILLTIDRYL AIVHAVFALK ARTVTFGVVT SVITWLVAVF ASVPGIIFTK CQKEDSVYVC GPYFPRGWN EHTIMRNILG IVILINTFQE FFGLSNCEST SQLDQATQVT ETLGMTHCCI AVRVIPTIMI VYFLFWTPYN KFRYLSVFF RKHITKRFEK QCPVFYRETV DGVSTNTPS TGEQEVSAAGL NP1IYAFVGE KAGAAATCCT CAGGTCCCAC AGAATGAAC AGTFTTCTA AAATAAAGTC AAGCCAAGCT A GTCCTACCCC AAAGAAATC CTAGCAAGCA AAGTGGCTT CCTTCTGTAG GCCCCAGCCA GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGATCAGAG TGACITAAACA GTTAGAGGGC ACTTGATGAG TAAGGTGAAA TAGGGAAC TAGGTGAGAG AAGTCAAGG ATCAGACT TGTGATTAGA AACCATGTCT ACATCTGGAG AGAACAGTT AAGTCAAGG ATCAGACT TGTGATTAGA GACTGCCAGG GTCCATATGA CCAAGCGGG GTCCAGGTG TGAAGCTGGG GTTGAGGATC CATTATCTGA ATTTTCCACT CTATGGATGA TCACTTTTAT TCTTTTCTT TCTTTGAAT TATTTCCATT TGTATTATCC TAAATTCCT GGTAGATCAC CTGTGAAGC TTGCAACTGT CTGATARGAA TAAAGGGGGA AGGATTTGAC TTTACAGAG AGACTTCAGA AGAGTCTC TCTAGGAGCA AATTGGGGG AATCCAGTGG GAAGAGGTG GAAGACTGCA CTTGAGCTGC GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT	Homo sapiens

462	152299 Interleukin- 8 Receptor A	NM_000634	Homo sapiens
			agctgttaag tcaactctgat cctctgactgc agctcctact gtgggacaca cctggccggt A
			gcttcagtta gatcaaacca ttgctgaac atctaaatt cactggcagc atgtcaata ttacagatcc
			acagatgtgg gatttgatg atctagaac ctgagacact caacaagtat gtgtgatca tgcctatgc
			cagccctgt atgtagaaa ttgctgagcc tgctgggaaa cctcctgggt atgtgttca tcttatag
			cagggtcggc cgtccgtca ctgatgtcta cctgctgaac ctggtctgg ccgacctact
			cttgcctcg acctgccc tctgggccc tctgggccc ctccaaggtg aatgctgga ttttggcac
			attcctgtgc aagtggtct cactcctgaa ggaagtcaac ttctacagt gcatcctgct
			gtggcctgc atcagtgtg accttacct ggcattgtc catgccacac gcacactgac
			ccagaagcgt cacttggtca agttgtttg tcttggtgc tgggactgt ctatgaatct
			gtccctgcc tcttctctt tccgccaggc ttaccatcca aacaattcca gtccagtgtg
			ctatgaggtc ctgggaatg acacagcaa atggcggatg gtgtgctgga tctgctca
			caccttggc ttcatcgtgc cgtgtttgt catgctgttc tgcctatggt taccctgctg
			tacactgttt aagggccaca tggggcagaa gcaccgagcc atgaggttca tctttgctgt
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			catcgcccaa aatttctgc atggattcct caagatcctg gctatgcatg gctgggtcag
			caaggagttc ttggcagtc atcgtgttac ctctacact tcttctgtc tcaatgtctc
			ttccaacctc tgaataacct cगतgaagg atctcttc tcagaaggaa agaataacca
			acacctgag gtgtgtgtg gaaggtgac tggctctgga caggcactat ctgggtttt
			gggggacgt ataggtgtg ggaagttag gaactgtgt cttcaggggc cacaccaac
			ttctgaggag ctgttgaggt acctccaag accggcctt gcacctccat ggaacacgaag
			caccatcatt ccggtgaac gtcacatct taaccacta actggctaag tagcatggcc
			acatctgagc ccgaatctg acattagat agagaacagg gctgaagctg tgtcctcatg
			agggtggat gctctcgttg acctcacag gagcatctcc tcaactctga gtgttaagcg
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			catctcaggt gtgttgagt gtctgctgga gacattgagg caggcactgc caaaacatca
			acctgccagc tggcctgtg aggagctgga aacacatgtt cccctgggg gtgttggtg
			aacaaagaga aagagggtt ggaagccaga tctatgccac aagaaccccc ttaccacca
			tgaccaacat cgcagacaca tgtgctggcc acctgctgag cccaagtgg acgagacaa
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			gaaagccatg tgcagccacc agtccattgg gcaggcagat gtcttaata agcttctgt
			tccgtgcttg tccctgtgga agtatcttg ttgtgacaga gtaaggggtg tgtgagcat
			tggtggctgt tctgagta gaatggggc agcacctctt aagaaggcac ctctctgggt
			tgaagggcag tgttccctgg ggccttaact cctgctaga cagtctctt aggcacagaa
			actcctgttc atgcccatac cctgggccaa ggaagatccc ttgtccaca agtaaaagga
			aatcctctc caggagttct cagcttcacc ctgaggtgag catcatcttc tgggttaggc
			cttgccttag catagcctgc ctcaagctat gtgagctcac cagtccctcc ccaaatgctt
			tccatgagtt gcagttttt cctagttctgt ttccctctt tggagaacag ggcctgtctg
			gtttgttcac tgtatgtct tgggtccttg agcctactaa atgtcaata aataatgac

463	152299 Interleukin-8 Receptor A	NP_000625.1	acaggaatga atgcatgctg aaaagaccac tctttt MSNITDPQMW DFDLNFQGM PPADEYSPC MLETETLNKY VVIAYALVF LLSLLGNSLV P MLVILYSRVG RSVTDVYLLN LALADLLFAL TLPWAASKV NGWIFGTFLC KVSLLKKEVN FYSGILLAC ISVDYLAIV HATRTLQKR HLKVFCLGC WGLSMNLSP FFLFRQAYHP NNSSPVCYEV LGNDTAKWRM VLRLPHTFG FIVPLFVLMF CYGFTLRTLK KAHMGQKHRA MRVIFAVLI FLCLWLPYNL VLLADTLMT QVIOESCERR NNIGRALDAT EILGFLHSL NP1IYAFIQ NFRHGLKIL AMHGLVSKF LARHRTSYT SSSVNVSSNL	Homo sapiens
464	158822 Mas Proto-Oncogene	NM_002377	cctgagccct cctcatggat gggtaaacg tgacatcatt tgtgtttgag gaacccacga A acatctcaac tggcaggaa gctcagtcg ggaatgcaca tggcaaatc cccatcgtgc actgggtcat tatgagcatc tccccagtgg ggtttgttga gaattggatt ctctctggt tctgtgctt ccgcatgaga agaaatccct tcaactgtcta catcaccac ctgtctatcg cagacatctc actgctcttc tgtatttcca tctgtctat cgtactatgct ttagattatg agctttcttc tggccattac tacacaattg tcacattatc agtgactttt ctgtttggct acaacacggg cctctatctg ctgacggcca agtggtgcctg ggtgtgcctt tctgtccctt accccatctg gtaccgatgc catcgcccca agtaccagtc ggcattggct tgtgccccct tgtggctct tcttgcttg gtgaccacca tggagatgt catgtgcac gacagagaag aagagagtc cctcggaaat gactgccgag cagtcacatc ctttatagcc atcctgagct tctgtgctt cagccccctc atgtggtgt cagcaccat cttggtcgtg aagatccgga agaacacgtg ggttcccat tctccaagc ttacatagtc catcatggc accatcata tattcctcat cttgctatg cccatgagc tctttacct gctgtactat gagtattggt cgaccttgg gaacctacac cacattccc tgctctctc cacaatcaac agtagcgcca acccttctat tctctctt gtgggaagca gaagaagaa gagattcaag gactcctaa aagttgtctt gaccagggt ttcaaatg agaatgcaacc tggcgccag aaagacaatt gtaatacgtt cacagttgag actgtcgtc aagaactgt agggaggtg tggataaaaa tgggtgaaca caggtcattt ttagttgtg cttggaatat gacttaagta tctcctaaat gtgatacaga agaacatctc atcccatg catgagatc taattaatga tgaaa MDGNSVTSFV VEEPTNISTG RNASVGNHR QIPVHWIM SISPVGFVEN GILLWFLCFR P MRRNPFTVYI THLSIADISL LFCIFILSID YALDYELSSG HYVTIVTSLV TFLFGYNTGL YLLTAISVER CLSVLYPIWY RCHRPKYQSA IVCALLWALS CLVTMEYVM CIDREESH RNDCRVAVIF IALISFLVFT PLMLVSTIL VVKIRKNTWA SHSKLYIVI MVTIIIFLIF AMPMRLLYLL YYEYWSFTGN LHHISLLFST INSSANPFIY FVGVSSKKR FKESLKVLT RAFKDEMQR RQDNCNTVT VETV	Homo sapiens
465	158822 Mas Proto-Oncogene	NP_002368.1	atgctgccg actggaagag ctcttgatc ctcatggctt acatcatcat ctctctact A ggcctccctg ccaactcctt ggccttgctg ggccttgctg ggcggtaccg ccagccccag cctgcaactg tgacatcct cctgctgagc ctgacgtggt ccgacctcct cctgctgctg ctgtgcccc tcaagatcat cgaggctgctg tgaacttcc gctgggtacct gcccaggctc gtctgcgccc tcaagagttt tggcttctac agcagcatct actgcagcac gtggctcctg gcgggcatca gcatcgagcg ctacctggga tggcttctcc cctgagagta caagctctcc cgccggcctc tgtatggagt gattgcagct ctggtggcct ggttatgtc ctttgggtcac tgcaccatcg tgatcatcgt tcaatacttg aacacgactg agcaggtcac aagtggcaat	Homo sapiens
466	159152 G Protein-Coupled Receptor GPR43	NM_005306		Homo sapiens

467	159152 G Protein- Coupled Receptor GPR43	NP_005297.1	gaaattacct gctacagagaa cttacaccgat aaccagttgg aactgtgtgt gcccgtgctg ctggagctgt gcctgggtgct cttcttcate cccatggcag tcaccatctt ctgctactgg cgttttgtgt ggatcatgct ctcaccagccc cttgtggggg ccagagggcg gcgcgagacc gtggggctgg ctgtgtgtgac ctagctcaat agccctgggt ggcggtcaat agccgtgggtg tcccacctgg tggggtatca ccagagaaaa agccctgggt agccgtgggtg ttcagttcac tcaacgccag tctggacccc ctagctcttt attctcttc ttcagttggtg cgcaggccat ttgggagagg gctgcagggtg ctgcggaatc agggctcctc cctgttggga cgcagaggca aagacacagc agaggggaca aataggaca ggggtgtggg tcaaggagaa gggatgcaa gttcgacct cactacagag tag LLPDKWSSLI LMAYIIIFLT GLPANLILALR AFVGRIRQPQ PAPVHILLLS LTLADLILL P LRPLYGVIAA SNFRWYLPKV VCALTSGFY CTIVIIQYL NTTEQVRSGN EITCYENFTD NQLDVVLPVR LELCLVLFIT PMAVTIFCYW RFVWIMLSQP LVGAQRRRRA VGLAVVTLN FLVCFGPYV SHLVGYHQRK SPWRSIAV FSSLNASLDP LLFYFSSSVV RRAFGRGLQV LRNQGSSLLG RRKDTAEGT NEDRGVQGE GMPSSDFTTE	Homo sapiens
468	159973 Vasoactive Intestinal Polypeptide Receptor 1	NM_004624	ggccacaggc cagcgccact ctgccaggct cccggccatc gccgcctgg tgcgcccgc A gccagctctt tgcccgcgcg gggccgcgcg ccgcgggctc agggcagacc atgcgcgcg caagtcogct gccgcgcgcg tggctatgctg tctgtgcagg cgcctcgcc tgggcccctg ggccggcggg cgccagggcg gccaggctgc aggaggagtg tgactatgtg cagatgatcg aggtgcagca caagcagtcg ctggaggagg ccagctgga gaatgagaca ataggctgca gcaagatgtg ggacaacctc acctgctgac cagccacccc tggggggcag gtagttgtct tggcctgtcc cctcatcttc aagctcttct cctccattca aggcgcgaat gtaagccgca gctgcaccca cgaaggctgg acgcacctgg agctgtgccc gtacccatt gctgtggtt tggatgacaa ggcagcgagt ttggatgagc agcagacct gttctacggt tctgtgaaga ccggctacac cattggctac ggcctgtccc tgcgccacct tctgtcgcc acagctatcc tgagcctgtt caggaagctc cactgcacgc ggaactacat ccacatgcac ctcttcata ccttcactct gagggtgccc gctgtcttca tcaaaagactt ggcctcttcc gacagcgggg agtcggacca gtgctccgag ggctcggtgg gctgtaaggc agccatggtc tttttccaat attgtgtcat ggctaaactc ttctggctgc tgggtgaggg cctctacctg tacacctgc ttgccgtctc cttcttctct gagcggaggt ccctctgggg gtacatactc atcggtggg gggtacccag caccattcac atggtgtgga ccctcgccag gatccatttt gaggattatg ggtgctggga caccatcaac tctcactgt ggtggatcat aaaggggccc atcctcacct ccatcttgtt aaacttcac cttgtttatt ccatcatccg aatcctgctt cagaaactgc ggcccccaga tatcaggaag agtgacagca gtccatactc aggttagcc aggtccacac tctgtctgat cccctgttt ggagtacact acatcatgtt cgccttcttt ccggacaatt ttaagcctga agtgaagatg gtctttgagc tgcgtcgagg gttcttccag ggttttggg tggctatcct ctactgcttc ctcaatggtg aggtgcaggc ggagctgagg cggaagtggc ggcgctggca cctgcagggc gtccctgggtt ggaaccccaa ataccggcac ccgtcgggag gcagcaacgg cgccacgtgc agcacgagg ttccatgct gaccgcgtc agccaggtg ccgcgcgtc ctccagcttc caagccgaa gttccctggt ctgaccacca ggatccagg ggcccaaggc ggcctctccc gcccttccc actcaccccc gcagacgccc gggacagagg	Homo sapiens

Accession	Gene	Protein	Sequence	Species
469	15973 Vasoactive Intestinal Polypeptide Receptor 1	NP_004615.2	<p>cctgcccgg cgcggccagc cccggccctg ggctcggagg ctgccccgg ccctcgtgtc</p> <p>tctggtccgg acactcctag agaacgcagc cctagagcct gcctggagcg ttcttagcaa</p> <p>gtgagagaga tgggagctcc tctcctggag gattgcaggt ggaactcagt cattagactc</p> <p>ctctcccaa ggcctctac gccaatcaag ggcaaaaagt ctacatactt tcatectgac</p> <p>tctgccccct gctgctctct ctgcccatt ctgcaaacg aaccggtgga tctcaaacac</p> <p>acactggtgt gacttgaggg agaaaagtt ctgccccggg aaggtcacca gccacaacac</p> <p>cacggtagt cctgaattt caccattgct gtcaagttcc ttgggttaa gcattaccac</p> <p>tcaggcatct gactgaagat gcagctcact accctattct ctctttacgc ttagtatatca</p> <p>gctttttaa gtgggttatt ctggagtttt tgtttggaga gcacacctat cttagtggtt</p> <p>ccccaccgaa gtgactggc cctgggtgca gtctggtggg aggaacgtgc aacccaagga</p> <p>ctgagggact ctgaagctc tgggaaatga gaagcgagcc accagcgaat gctaggcttc</p> <p>ggactaagcc tactgtctt ccaagtctca gtggcttcat ctgtcaagtg ggtctgtca</p> <p>caccagccat acttatctt ctgtgctgtg gaagcaacag gaatcaagag ctgctctct</p> <p>tgtccacca cctatgtgct accctgtcta cacatacagg atttgaact agatctgtct</p> <p>ctgacagaaa gcagatacct caccctgtta cactacacag gatgtgtgca cceatgggct</p> <p>gataggaatg tgaagcacg gactcttact gctaaacttt gtgtatcgta accagccaga</p> <p>tctcttgggt tatttgttta ccacttgtat tattaatgcc attatcctga attccccctg</p> <p>ccacccacc ctccctggcg tgtggtgag gaggcctcca tctcatgtat catctggata</p> <p>ggagcctgct ggtcacagcc tctctgtct gcccttcacc ccagtgcca ctcagcttcc</p> <p>taccacacc tctgccagaa gatccccca ggactgcaac aggcttgtgc acaataaat</p> <p>gttgctggg a</p>	Homo sapiens
470	16040 Vasoactive Intestinal Polypeptide Receptor 2	NM_003382	<p>cgggacgagg ggcggcccc cgcctcggg gcgctcggct acagctgcgg ggcgcgaggt</p> <p>ctccgcgac tcgctcccg cccatcgttg aggcgcgga acccgggga cctaggacgg</p> <p>agggcgcggg cgctgggccc ccccgccac gctgagctcg ggatgcggac gctgctgct</p> <p>cccgcgctgc tgacctgctg gctgctgcc cccgtgaaca gcattcaccc agaatgcgga</p> <p>tttcatctgg aaatacagga ggaagaaaca aaatgtacag agcttctgag gtctcaaca</p> <p>gaaaaacaca agcctgcag tggcgtctgg gacaacatca cgtgctggcg gccctgccaat</p> <p>gtgggagaga ccgtcacggt gccctgccc aaagtcttca gcaattttta cagcaagca</p> <p>ggaaacataa gcaaaactg tacgagtgc ggtggttcag agacttccc agattcgtc</p> <p>gatgcctgtg gtaacagca cccgaggtat gagagcaaga tcactgttta tattctggtg</p> <p>aaggccattt ataccctggg ctacagtgct tctctgatgt cctctgcaac aggaagcata</p> <p>attctgtgcc tcttcaggaa gctgcactgc accaggaatt acatccacct gaacctgtc</p> <p>ctgtcttca tcttgagagc catctcagtg ctggtcaagg acgagttct ctactccagc</p>	Homo sapiens



471	160040 Vasoactive Intestinal Polypeptide Receptor 2	NP_003373.1	<p>tctggcacgt tgcaactgccc tgaccagcca tctctctggg tgggctgcaa gctgagccctg gtcttctctgc agtactgtcat catggccaac tcttctctggc tgtgtgtgga ggggctctac ctccacaccc tctgtgtggc catgtctccc cctagaaggt gcttctctggc ctacctctctg atcgatggg gcttctccac cgtctgcac gctgcatgga ctggcgccag gctctactta gaagacaccg gttgctggga taaaaagac cacagtgtgc cctgggtgggt catacgaata cagattttaa ttccatcat cgtcaatttt gtcctttca ttagtattat acgaattttg ctgcagaagt taacatcccc agatgtcggc ggaacgacc agtctcagta caagaggctg gcaaagtcca cgtctctgt tctccgtgt ttcggcgctc actacatggt gtttgccctg tttcccatca gcatctctc caataaccag atactgtttg agctgtgcct cgggtcgttc cagggcctgg tgggtggcct cctctactgt ttcctgaaca gtgaggtgca gtgcgagctg aagcgaat ggcgaagccg gtgccgacc ccgtccgga gccgggatta cagggtctgc ggttctctct tctccacaa cggctcggag ggcgccctgc agttccaccg ceggtccoga gcccagtcct tctgcaaac ggagacctg gctcatctag cccacccctg cctgtcggac gcggcgggag gccacgggt cggggcttct gcgggctga gacgcccgt tctctcttcc agatgccga gacacgtgtc ggcaggtca gcgcgtct gactccgtca agctggtgtg ccactaaacc ccatacctgg</p>	Homo sapiens
472	160055 Motilin Receptor (GPR38)	NM_001507	<p>atgggcagcc cctggaacgg cagcagcggc cccgaggggg cgcggggagcc gccgtggccc A gcgtgccgc cttgcgacga gcgcgcgtgc tgcctcttc cctgggggc gctggtgccg gtgaccgctg tgtgcctgtg cctgttcgtc gtccgggtga gcggcaacgt ggtgaccgtg atgctgatcg ggcgtaccg ggacatgcgg accaccaca actgtacct ggcagcatg gccgtgtccg acctactcat cctgtcggg ctgccgttg accgtaccg ccttggcg tcgcggccct ggtgttcgg gccgtgtgc tgcgcctgt cctctacgt gggcgagggc tgacactacg ccacgtgtg gcacatgacc gcgctcagcg tcgagcgcta cctggccatc tgccgcccgc tccgcgccg cgtcttggtc accggcgcc ggtccgcgc gctcctcgt gtgctctggg ccgtggcgct gctctctgc ggtcccttct tgttctggt gggcgtcag caggacccc gcatctcct agtccgggc ctcaatggca ccgcgggat cgcctctcg cctctgcct cgtcgcgcc tctctgctc tcgcgggcg caccgccgtc cccgccgtg ggcccccaga ccgcggagg ccgcgcgtg ttacaccgg aatgccggc gaccccg cagctggcg cgtgcgtgt catgtgtgtg gtacaccag cctactctt cctgcccctt ctgtgctca gcatcctcta cgggtctc cggcgagcag tgtggagcag ccggcgccg ctgcgaggcc cggccgctc gggcgggag agaggccacc ggcagaccgt ccgcgtctg ctggtggtg tcttgccatt tataattgc tgggtgcct tccacgttg cagaatcatt tacataaaca cggagattc gcgatgatg tacttctctc agtacttaa catcgtcgtc</p>	Homo sapiens

473	160055	Motilin Receptor (GPR38)	NP_001498.1	ctgcaacttt tctatctgag cgcattctatc aacccaatcc tctacaacct catttcaaag aagtacagag cggcgccctt taaactgctg ctgcgaagga agtccaggcc gagaggcttc cacagaagca gggacactgc ggggaagtt gcaggggaca ctggaggaga cacggtgggc tacaccgaga caagcgctaa cgtgaagacg atgggataa MGSPWNGSDG PEGAREPPWP ALPPCDERRC SPFPLGALVP VTAVCLCLFV VGVSGNVTV P MLIGRYRDMR TTTNLYLGSML AVSDLLILG LPFDLYRLWR SRPWVEGPLL CRLSLYVGE CTYATLLHMT ALSVERYLAI CRPLRARLV TRRRVALIA VLMAVALLSA GPFLFLVGE QDPGISVPG LINGTARIASS PLASSPPLWL SRAPPSPPS GPETABAAAL FSRECRPSPA QLGALRVMLW VTTAYFFLPF ICLSLYGLI GRELWSSRRP LRGPAAAGRE RGHRTVTVL LVVLAFIIC WLPFHVGRII YINTEDSRMM YFSQYFNIVA LQLFYLSASI NPILYNLISK KYRAAAFKLL LARKSRPRGF HRSRDTAGEV AGDTGGDTVG YTETSANVKT MG atggacctgc ccccgagct ctccttcgag ctctatgtgg ccgcctttgc gctgggttc A cgcgtcaacg tccctggccat ccgaggcgag acggccacag ccggctccg tctcaccct agcctggtct agccctgaa cctgggctgc tccgacctgc tctgacactg ctctctgccc ctgaaggcgg tggaggcgct agcctccggg gcctgcctc tgcgggcttc gctgtgccc gtcttcgagg tggccactt ctcccaact ctcccgagc ggggtcttc ggcgcctg agtgcaggcc gctacctggg agcagcttc cctttgggt accaagcctt ccgaggccg tgctattcct ggggggtgtg cgcggccatc tgggccccg tctgtgtca cctgggtctg gtctttgggt tggaggctcc aggaggctgg ctggaccaca gcaacacctc cctgggcatc aacacacccg tcaacggctc tccggtctgc ctggaggctg gggaccocgg cctgcggc cgggcccgct tcaagccttc tctcctgctc ctggagctgc ccttgccat cacagcctt tgctacgtgg gctgctccg ggcactggc cgcctcggc tgacgcacag cgggaagctg cgggccgct ggggtggcgg cggggccctc ctacagctgc tgcctgctg aggacctac aacgcctcca acgtggccag ctccctgtac cccaatctag gagctcctg cgggaagctg gggctcatca cgggtgcctg gagtgtgtg cttaatccgc tggtagccgg ttacttggga agggtcctg gcctgaagac agtgtgtgcg gcaagaacgc aagggggcaa gtcccagaag taa	Homo sapiens
474	160059	G Protein- coupled Receptor GPR40	NM_005303	atggacctgc ccccgagct ctccttcgag ctctatgtgg ccgcctttgc gctgggttc A cgcgtcaacg tccctggccat ccgaggcgag acggccacag ccggctccg tctcaccct agcctggtct agccctgaa cctgggctgc tccgacctgc tctgacactg ctctctgccc ctgaaggcgg tggaggcgct agcctccggg gcctgcctc tgcgggcttc gctgtgccc gtcttcgagg tggccactt ctcccaact ctcccgagc ggggtcttc ggcgcctg agtgcaggcc gctacctggg agcagcttc cctttgggt accaagcctt ccgaggccg tgctattcct ggggggtgtg cgcggccatc tgggccccg tctgtgtca cctgggtctg gtctttgggt tggaggctcc aggaggctgg ctggaccaca gcaacacctc cctgggcatc aacacacccg tcaacggctc tccggtctgc ctggaggctg gggaccocgg cctgcggc cgggcccgct tcaagccttc tctcctgctc ctggagctgc ccttgccat cacagcctt tgctacgtgg gctgctccg ggcactggc cgcctcggc tgacgcacag cgggaagctg cgggccgct ggggtggcgg cggggccctc ctacagctgc tgcctgctg aggacctac aacgcctcca acgtggccag ctccctgtac cccaatctag gagctcctg cgggaagctg gggctcatca cgggtgcctg gagtgtgtg cttaatccgc tggtagccgg ttacttggga agggtcctg gcctgaagac agtgtgtgcg gcaagaacgc aagggggcaa gtcccagaag taa	Homo sapiens
475	160059	G Protein- coupled Receptor GPR40	NP_005294.1	MDLPPQLSFG LYVAAFALGF PLNVLAIRGA TAHARLRLTP SLVYAINLGC SDLLLTVSLP P LKAVEALASG AWPLPASLCP VFAVAHFFFL YAGGGFLAAL SAGRYLGAAP PLGYQAFRRP CYSWGVCAAI WALVLCHLGL VFGLEAPGGW LDHSNTSLGI NTPVNGSPVC LEAWDPASAG PARFSLSLLL FFLPLAITAF CYVGCLRALA RSLTHRRKL RAAWVAGGAL LTLLLCVGPY NASNVASFLY PNLGGSWRKL GLITGWSV LNPLVTGYLG RGPGLKTVCA ARTQGGKSQK atgcacaccg tggctacgtc cggaccacaac gcgtcctggg gggcaccggc caacgcctcc A ggctgccccg gctgtggcgc caacgcctcg gacggcccaag tccctcgcc gcgggcccgtg gacgcctggc tgcgtccgct ctcttcgag gcgtgatgc tgcctggcct ggtggggaac tcgctgggtca tctacgtcat ctgcgcccaac aagccgatgc ggaccgtgac caacttctac atcgcccaac tggcgccac ggacgtgacc ttcctctgt tctgcgtccc ctccacggcc ctgctgtacc cgtgccccg ctgggtgctg ggcacttca tctgcaagtt cgtcaactac atccagcagg tctcgggtga gccacgtgt gccacttga ccgcatgag tgtggaccgc tggtagctga cgggtgtccc gttgcgcgc ctcacaccgc gcacgcccc cctggcgctg gctgtcagcc tcaagcatcg gtaggctct cggcggtgtg ctgcgcccgt gctgcgccc	Homo sapiens
476	160189	G Protein- Coupled Receptor GPR54	NM_032551	atgcacaccg tggctacgtc cggaccacaac gcgtcctggg gggcaccggc caacgcctcc A ggctgccccg gctgtggcgc caacgcctcg gacggcccaag tccctcgcc gcgggcccgtg gacgcctggc tgcgtccgct ctcttcgag gcgtgatgc tgcctggcct ggtggggaac tcgctgggtca tctacgtcat ctgcgcccaac aagccgatgc ggaccgtgac caacttctac atcgcccaac tggcgccac ggacgtgacc ttcctctgt tctgcgtccc ctccacggcc ctgctgtacc cgtgccccg ctgggtgctg ggcacttca tctgcaagtt cgtcaactac atccagcagg tctcgggtga gccacgtgt gccacttga ccgcatgag tgtggaccgc tggtagctga cgggtgtccc gttgcgcgc ctcacaccgc gcacgcccc cctggcgctg gctgtcagcc tcaagcatcg gtaggctct cggcggtgtg ctgcgcccgt gctgcgccc	Homo sapiens

477	160189 G Protein-Coupled Receptor GPR54	NP_115940.1	<p>caccgcctgt caccggggcc gcgcgcctac tgcagtgagg ccttccccag ccgcgcctg gagcgcctc tgcactgta caactgctg gcgctgtacc tgcgtccgct gctcgcacc tgcgcctgct atgcggccat gctgcgccac ctggcgctgg ccccgcccc gccgatagcg cctgcaggcg gcagtgctg gcagagcgct caggcgccag gctcgcggc tggcgggcgc cgtggctcct ctcttcggcg cctgctggg ccccatccag ctgttcctgg tgcgcaggc gctggggccc gggggctcct ggacccacg cagctacgccc gctacgcgc ttaagacctg ggtcactgc atgtctaca gaaactccg gctgaacccg ctgctctacg ccttctggg ctgcacttc cgacaggcct tccgcgcgt ctgccccctg gcgcgcgcc gcccccgccg ccccccgcc cggaccctc cggaccccg agccccacac gcggagctgc accgcctggg tccccaccg gcccccgca gggcgagaa gccagggagc agtgggctgg ccgcgcggcg gctgtgcgc ctgggggagg acaagcccc tctctga</p>	Homo sapiens
478	160202 Adrenomedullin Receptor (ADMR)	LG6564	<p>agtgggctgg ccgcgcggcg gctgtgcgc ctgggggagg acaagcccc tctctga  MHTVATSGPN ASWGAPANAS GCPGCCANAS DGPVSPRAV DAWLVPLFFA ALMLLGLVGN P  SLVIYVICRH KPMRTVTFNY IANLAATDVT FLCCVPFTA LLYPLPGWVL GDFMCKFVNY  IQQVSVQATC ATLTAHSVDR WYVTVFPLRA LHRTPRLAL AVSLSIWVGS AAVSAPVLAL  HRLSPGPRAY CSEAFPSRAL ERAFALYNLL ADYLLPLLAT CACYAAMLRH LGRVAVRPAP  ADSAHQGVQL AERAGAVRAK VSRLVAHVLL LFAACWGPQ LFLVLQALGP AGSWHPRSVA  AYALKTWAHC MSYNSALNP LLYAFILGSHF RQAFRRVCP APRRRPRRR PGPSDPAAPH  AELHRLGSHP APARAQKPGS SGLAARGLCV LGEDNAPL  CCGCGCCAC GTGCGTGTG CTGCGCGCT CAGTGACGG GCATTGTFCAT GCACGTGGTG A  ACCTATCATC AGACCTGCT CTGCTCACA CTGATGGAA CCCACATCTG CCTACACTGC  CACCTGGTAC CAACCTGCT CTCTCTCTA TGATGTCAT TGACTGCTG TACATGCTAG  ACTGCGCTAT TCACCGGATC CTTGACAACT TTATCAGCCA GACTGCCGG GCGGGCTGG  ATGCTGTGGT CCATTAATTG CTAAGGACCA GACCGCGGG GCACATGCG CTCTCTTCC  TTCTGTGACA CCCAGCGTTA CATAATCAT ACCACGGGT ATAGCAGAC TGCTGCGAGC  AACCAGCCAC CCTGCAGCCA AGCCTGAGCT TTCAGGCACA CCATTGCTC GCAAAGACTT  GCGCCATGTG TCCCACTCAG TGTCTTACAC CCAGCTGAGG T  cagcctcctc acagctcccc atagcctgga cctgcgcgc ctcctccag gaccgagggg A  ctcccaaggg aaactcaggc gtgtgctggt cccaatgtca gtgaaccca gctggggggc  tgccccctcg gagggggtca cgcagtgcc taccagtgac ctggagaga tccacaactg  gaccgagctg cttgacctct tcaaccacac ttgtctgag tgccacgtgg agtcagcca  gagcaccag cgcgtgggtc tcttgccc ctacctggc atgtttgtgg ttgggctggt  ggagaacctc ctgggtgatat gcgtcaactg gcgcggtca ggcggggcag ggctgatgaa  cctctacatc ctcaacatgg ccctgcgga cctgggcatt gtctgtctc tgcctgtgtg  gatgctggag gtacagctgg actacacctg gctctggggc agcttctcct gcgcttcac  tcactacttc tactttgtca acatgtatag cagcatcttc tctctggtgt gcctcagtg  gcagcgtat gtacacctca ccagcctc gcctcctgg cagcgttacc agcaccaggt  gcggggggc atgtgtgcag gcactgggt cctctcgcc atcatcccg tgcctgaggt  ggtccacatc cagctggtgg agggccctga cccatgtgc ctcttcattg cacttttga  aacgtacacg acctggggcc tggcggtggc cctgtccacc acctcctgg gcttctgct  gcccttccct ctcatcacag tcttcaatgt gctgacagc tgcgggctgc ggcagccagg  acaacccaag agccggcgcc actgcttgct gctgtgcgc taagtggcc tcttgtcat</p>	Homo sapiens
479	160202 Adrenomedullin Receptor (ADMR)	NM_007264	<p>cagcctcctc acagctcccc atagcctgga cctgcgcgc ctcctccag gaccgagggg A  ctcccaaggg aaactcaggc gtgtgctggt cccaatgtca gtgaaccca gctggggggc  tgccccctcg gagggggtca cgcagtgcc taccagtgac ctggagaga tccacaactg  gaccgagctg cttgacctct tcaaccacac ttgtctgag tgccacgtgg agtcagcca  gagcaccag cgcgtgggtc tcttgccc ctacctggc atgtttgtgg ttgggctggt  ggagaacctc ctgggtgatat gcgtcaactg gcgcggtca ggcggggcag ggctgatgaa  cctctacatc ctcaacatgg ccctgcgga cctgggcatt gtctgtctc tgcctgtgtg  gatgctggag gtacagctgg actacacctg gctctggggc agcttctcct gcgcttcac  tcactacttc tactttgtca acatgtatag cagcatcttc tctctggtgt gcctcagtg  gcagcgtat gtacacctca ccagcctc gcctcctgg cagcgttacc agcaccaggt  gcggggggc atgtgtgcag gcactgggt cctctcgcc atcatcccg tgcctgaggt  ggtccacatc cagctggtgg agggccctga cccatgtgc ctcttcattg cacttttga  aacgtacacg acctggggcc tggcggtggc cctgtccacc acctcctgg gcttctgct  gcccttccct ctcatcacag tcttcaatgt gctgacagc tgcgggctgc ggcagccagg  acaacccaag agccggcgcc actgcttgct gctgtgcgc taagtggcc tcttgtcat</p>	Homo sapiens

480	160202 Adrenomedullin NP_009195.1 in Receptor (ADMR)	gtgctggctg ccctatcatg tgacctgct accctgctcct gctgctcaca ctgcatggga ccacatctc cctccactgc cacctggtcc accctgctcct ttctctctat gatgctattg actgctctc catgctgcac tgtgtcatca accctatcct ttctctctat ttctctctat ttctctctat ttctctctat cggctcctg aatgtgtgtag tccattacct tccattacct tccattacct tccattacct tccattacct cgctcctct tctctctgtt ccaccacgca ttccatctatc atccacaaag gtgatagcca gctgctgca gcagccccc ccctgagcc accctgagcc aagctgagc ttccagggac accattgct tccaaatct tccctctct tccctctct tccctctct tccctctct tccctctct tccctctct MSVKPSWGP PSEGVTAVPT SDLGEIHNWT ELLDLFNHTL SECHVELSQS TKRVLFALY P Homo LAMEFVGLVE NLLVICVNR GSGRAGIMNL YILNMAIADL GIVLSLPVWM LEVTDYTWL sapiens WGSFSCRFTH YFYFVNMYS IFFLVCLSD RYVTLTSASP SWQRYQHRVR RAMCAGIWL SAIPLPEV HIQLVEGPEP MCLEMAPFET YSTWALAVALL STTILGFLLP FPLITVFNVL TACRLRQPGQ PKRRHCLLL CAYVAVFVMC WLPYHVTLLL LTLHGTHISL HCHLVHLLYF FYDVIDCFSM LHCVINPILY NFLSPHFRGR LLNAVVHYLP KDQTKAGTCA SSSSCSTQHS IIITKGDSP AAAAPHPEPS LSFQAHLLP NTSPISPTQP LTPS
481	160204 G Protein- Coupled Receptor RTA	atgcgggttc tgcttccaaa gccatctctt ccagcaggag agggctctac tctgagctcc A tatttccaa ggctccgggc cgcgctcgc gctggcctgc tgcctcggcg ggtccgcgcg ccggaggcgg gactcacagg aagagccctc cacaacagg ggcctcggcg gatcaggaca gctgcagggt ggtgtgcaga ctggtgagct gccagcagg gccacagacg gccaggcctg gagatggctg gaaactgctc ctgggaggcc catcccgcca acaggaaacag gatgtgcct ggcctgagcg agggccggga actctacagc cggggcttcc tgacctcga gcagatcgcg atgctgccgc ctccggcctg catgaaactac atctctcct tctctgctc gtgtggcctg gtgggcaacg gctggtcct ctggttttc gcttctcca tcaagaggaa ccccttctcc atctactcc tgcacctggc cagcgccgat gtgggctacc tcttcagcaa ggcggtgttc tccatcctga acacgggggg ctctcctggc aggtttgccc actacatcc cagcgtgtgc cgggtcctgg ggtctgcat gttccttacc ggcgtgagcc tctgcccgcg cgtcagcgc gagcgtgcg cctcggtcat ctctcccgcc tggactggc gccggcgccc caagcgctg tcggccgtgg tgtgcgctt gctgtgggtc ctgtccctcc tggtaacctg cctgcacaa tacttctgcg tgttctggtg ccgcgggggc cccggcgccc cctgcaggca catggacatc ttctgggga tctctctgtt cctgctctgc tggctgctca tgggtgctgc ctgctggcc ctcctcctgc acgtggagtg ccggggccga cggcgcccag gctctgccc gctcaaccac gtcatcctgg ccattgtctc cgtcttctc gtgtcctcca tctacttagg gatcgactgg ttctcttct gggtcttcca gatcccgcc ccttccccc agtacgtcac tgacctgtgc atctgcatca acagcagcg caagcccatc gtctacttcc tggcggggag ggacaagtgc cagcggtgtt gggagccgct caggggtgtc tccagcggg cctgcggga cggcgctgag ctgggggagg ccgggggag cagccccac acagtaccca tggagatgca gtgtccccc gggaacgct cctgagactc cagcgccctg agaggcagg ggaggaagc ggcctccaag acccttcgcc ttgggacagg aatgggacc tctctctgag tccatcagg agaagaaaga tctgttctct cctctggggc ctctctctc gtgggtggg gactcagggt gtggctggga gactgggag ccaccagca acagacctgt ggcccttgc cggctcccc accattctg ctccccaga gacctctgt acagaagtg ccccgaggtg gtggggcccc tcttggcct aggctggtg gtaaaagaga ggaggtcaac accagccta gccacctctg cctcttgggt

482	160204 G Protein- Coupled Receptor RTA	CAC39840.1	<p>cagccctcct tgactgtgtc ccagccagca ccaggccagc agcctcatcc ctgccattca</p> <p>gggctgttcc agagattcga tcctcttaag gcattatcag tgagcaaatg tgaaggaaat</p> <p>ggtgtctgga agaaagtctt ggttcacatg ccttgtagct aagcttttct gcaaacacac</p> <p>tccttcccc ccgtcgagtc atttggtgac tttgatggg ggatttctgg ttatgtcaag</p> <p>gctctggaga caggaagggc ctttgccgc ctgggtagt gacctgctt tttctgactc</p> <p>cggaacgagc cagtccctagg ctgctccgc gaggacttga ggtatccgc agccatgag</p> <p>gaccactgg gcagctcctg gacagcctct tggctccag cccaccgcga aagtggacac</p> <p>tggtccgcgc ctggccacct ggggactggc actgtggtgc acagtggccc aatgtggcca</p> <p>acggaagttt tataaaagac aaaaatgata tcaataaaca tttataact tgc</p> <p>MAGNCSWEAH PGNRNMCPG LSEAPELYSR GFLTIEQIAM LPPAVMNYI FLLCLCGIV P</p> <p>GNGLVLWFFG FSIKRNPFISI YFLHLASADV GYLFSKAVFS ILNTGGFLGT FADYIRSVCR</p> <p>VLGLCMFLTG VSLLPAVSAE RCASVIFPAW YWRRRPKRLS AVVCALLMWL SLLVTCILHNY</p> <p>FCVFLGRGAP GAACRHMDF LGILLFLCC PLMVLPCLAL ILHVECRARR QRSAKLHV</p> <p>ILAMVSVELV SSIYLGIDWF LFWFQIPAP FPEYVTDLCI CINSSAKPIV YFLAGRDKSQ</p> <p>RLWEPLRVVF QRALRDGAEL GEAGGSTPNT VTMEVQCPG NAS</p> <p>atgaatgggg tctcgaggg gaccagaggc tgcagtgaac ggcaacctgg ggtcctgaca A</p> <p>cgtgatcgct ctgtgtccag gaagatgaac tcttccggat gcctgtctga ggaggtggg</p> <p>tcctccgcgc cactgactgt ggttatactg tctgctgcca ttgctgctgg agtgcctggc</p> <p>aatgggctgg tgctgtggat gactgtcttc cgtatggcac gcacgtgttc caccgtctgc</p> <p>ttctccacc tggcccttgc cgatttcatg ctctcactgt ctctgcccc tgccatgtac</p> <p>tatatgtct ccaggcagtg gctcctcga gagtgggctt gcaactcta caccacctt</p> <p>gtgttctcga gctactttgc cagtaactgc ctctgtgtct tcatcttgtt ggacctgtg</p> <p>atctctgccc tctacccctg ctgggcccctg aaccaccgca ctgtgcagcg ggcgagctgg</p> <p>ctggcccttg ggtgtggct cctggccgc ctgtgtgtgt ctggcaccct gaaattcccg</p> <p>acaaccagaa aatggaatgg ctgtacgcac tgctacttgg cgttcaactc tgacaaatgag</p> <p>actgcccaga ttgggattga aggggtcttg gaggacaca ttatagggac cattggccc</p> <p>ttcctgtgg gcttctctgg gcccttagca atcataggca cctggcccca cctcatcccg</p> <p>gccaagctct tgcgggaggg ctgggtccat gccaacccgc ccaagaggct gctgctggg</p> <p>ctggtgagcg ctttctttat ctctgtgtcc ccgtttaacg ttgtgtctgtt ggtccatctg</p> <p>tggcgacggg tgatgctcaa ggaatctac cacccccga tctgtctcat cctccaggct</p> <p>agctttgccc tgggctgtgt caacagcgc ctaaacccct tctctacgt ctctgttggc</p> <p>agagatttcc aagaaaagt tttccagtct ttgacttctg cctggcgag ggcgtttgga</p> <p>gaggaggat ttctgtcatc ctgtccctg ggcaacgcc cccgggaatg a</p> <p>MNGVSEGRG CSDRQPGVLT RDRCSRKNM SSGCLSEEVG SLRPLTVVIL SASIVGVGLG P</p> <p>NGLVLMWTFV RMARTVSTVC FFHLALADEM LSLSLPIAMY YIVSRQWLLG EWACKLYTF</p> <p>VFLSYFASNC LLVFISVDRG ISVLYPVWAL NHRTVQRASW LAFGVWLLAA ALCSAHLKFR</p> <p>TTRKWNCGTH CYLAFNSDNE TAQIWIIEGVV EGHIIIGTIGH FLLGFLGPLA IIGTCAHLIR</p> <p>AKLLREGWVH ANRPRLLLV LVSAFFIWS PFNVLLVHL WRRVMLKEIY HPRMLLIQA</p> <p>SFALGCVNSS INPFYVFGV RDFQKEFFQS LTSALARAFG EEEFLSSCPR GNAPRE</p> <p>cagcctccct cttccacctc tgtctgccc tgctctcttg ctgcctctg gtcaggagct A</p> <p>gactgcctcc agggctggaa tctgtgtctc cctctgtgccc cagagcccca cgatgtcggc</p>	Homo sapiens
483	160206 G Protein- Coupled Receptor GPR32	NM_001506	<p>atgaatgggg tctcgaggg gaccagaggc tgcagtgaac ggcaacctgg ggtcctgaca A</p> <p>cgtgatcgct ctgtgtccag gaagatgaac tcttccggat gcctgtctga ggaggtggg</p> <p>tcctccgcgc cactgactgt ggttatactg tctgctgcca ttgctgctgg agtgcctggc</p> <p>aatgggctgg tgctgtggat gactgtcttc cgtatggcac gcacgtgttc caccgtctgc</p> <p>ttctccacc tggcccttgc cgatttcatg ctctcactgt ctctgcccc tgccatgtac</p> <p>tatatgtct ccaggcagtg gctcctcga gagtgggctt gcaactcta caccacctt</p> <p>gtgttctcga gctactttgc cagtaactgc ctctgtgtct tcatcttgtt ggacctgtg</p> <p>atctctgccc tctacccctg ctgggcccctg aaccaccgca ctgtgcagcg ggcgagctgg</p> <p>ctggcccttg ggtgtggct cctggccgc ctgtgtgtgt ctggcaccct gaaattcccg</p> <p>acaaccagaa aatggaatgg ctgtacgcac tgctacttgg cgttcaactc tgacaaatgag</p> <p>actgcccaga ttgggattga aggggtcttg gaggacaca ttatagggac cattggccc</p> <p>ttcctgtgg gcttctctgg gcccttagca atcataggca cctggcccca cctcatcccg</p> <p>gccaagctct tgcgggaggg ctgggtccat gccaacccgc ccaagaggct gctgctggg</p> <p>ctggtgagcg ctttctttat ctctgtgtcc ccgtttaacg ttgtgtctgtt ggtccatctg</p> <p>tggcgacggg tgatgctcaa ggaatctac cacccccga tctgtctcat cctccaggct</p> <p>agctttgccc tgggctgtgt caacagcgc ctaaacccct tctctacgt ctctgttggc</p> <p>agagatttcc aagaaaagt tttccagtct ttgacttctg cctggcgag ggcgtttgga</p> <p>gaggaggat ttctgtcatc ctgtccctg ggcaacgcc cccgggaatg a</p> <p>MNGVSEGRG CSDRQPGVLT RDRCSRKNM SSGCLSEEVG SLRPLTVVIL SASIVGVGLG P</p> <p>NGLVLMWTFV RMARTVSTVC FFHLALADEM LSLSLPIAMY YIVSRQWLLG EWACKLYTF</p> <p>VFLSYFASNC LLVFISVDRG ISVLYPVWAL NHRTVQRASW LAFGVWLLAA ALCSAHLKFR</p> <p>TTRKWNCGTH CYLAFNSDNE TAQIWIIEGVV EGHIIIGTIGH FLLGFLGPLA IIGTCAHLIR</p> <p>AKLLREGWVH ANRPRLLLV LVSAFFIWS PFNVLLVHL WRRVMLKEIY HPRMLLIQA</p> <p>SFALGCVNSS INPFYVFGV RDFQKEFFQS LTSALARAFG EEEFLSSCPR GNAPRE</p> <p>cagcctccct cttccacctc tgtctgccc tgctctcttg ctgcctctg gtcaggagct A</p> <p>gactgcctcc agggctggaa tctgtgtctc cctctgtgccc cagagcccca cgatgtcggc</p>	Homo sapiens
484	160206 G Protein- Coupled Receptor GPR32	NP_001497.1	<p>atgaatgggg tctcgaggg gaccagaggc tgcagtgaac ggcaacctgg ggtcctgaca A</p> <p>cgtgatcgct ctgtgtccag gaagatgaac tcttccggat gcctgtctga ggaggtggg</p> <p>tcctccgcgc cactgactgt ggttatactg tctgctgcca ttgctgctgg agtgcctggc</p> <p>aatgggctgg tgctgtggat gactgtcttc cgtatggcac gcacgtgttc caccgtctgc</p> <p>ttctccacc tggcccttgc cgatttcatg ctctcactgt ctctgcccc tgccatgtac</p> <p>tatatgtct ccaggcagtg gctcctcga gagtgggctt gcaactcta caccacctt</p> <p>gtgttctcga gctactttgc cagtaactgc ctctgtgtct tcatcttgtt ggacctgtg</p> <p>atctctgccc tctacccctg ctgggcccctg aaccaccgca ctgtgcagcg ggcgagctgg</p> <p>ctggcccttg ggtgtggct cctggccgc ctgtgtgtgt ctggcaccct gaaattcccg</p> <p>acaaccagaa aatggaatgg ctgtacgcac tgctacttgg cgttcaactc tgacaaatgag</p> <p>actgcccaga ttgggattga aggggtcttg gaggacaca ttatagggac cattggccc</p> <p>ttcctgtgg gcttctctgg gcccttagca atcataggca cctggcccca cctcatcccg</p> <p>gccaagctct tgcgggaggg ctgggtccat gccaacccgc ccaagaggct gctgctggg</p> <p>ctggtgagcg ctttctttat ctctgtgtcc ccgtttaacg ttgtgtctgtt ggtccatctg</p> <p>tggcgacggg tgatgctcaa ggaatctac cacccccga tctgtctcat cctccaggct</p> <p>agctttgccc tgggctgtgt caacagcgc ctaaacccct tctctacgt ctctgttggc</p> <p>agagatttcc aagaaaagt tttccagtct ttgacttctg cctggcgag ggcgtttgga</p> <p>gaggaggat ttctgtcatc ctgtccctg ggcaacgcc cccgggaatg a</p> <p>MNGVSEGRG CSDRQPGVLT RDRCSRKNM SSGCLSEEVG SLRPLTVVIL SASIVGVGLG P</p> <p>NGLVLMWTFV RMARTVSTVC FFHLALADEM LSLSLPIAMY YIVSRQWLLG EWACKLYTF</p> <p>VFLSYFASNC LLVFISVDRG ISVLYPVWAL NHRTVQRASW LAFGVWLLAA ALCSAHLKFR</p> <p>TTRKWNCGTH CYLAFNSDNE TAQIWIIEGVV EGHIIIGTIGH FLLGFLGPLA IIGTCAHLIR</p> <p>AKLLREGWVH ANRPRLLLV LVSAFFIWS PFNVLLVHL WRRVMLKEIY HPRMLLIQA</p> <p>SFALGCVNSS INPFYVFGV RDFQKEFFQS LTSALARAFG EEEFLSSCPR GNAPRE</p> <p>cagcctccct cttccacctc tgtctgccc tgctctcttg ctgcctctg gtcaggagct A</p> <p>gactgcctcc agggctggaa tctgtgtctc cctctgtgccc cagagcccca cgatgtcggc</p>	Homo sapiens
485	160210 G Protein- Coupled	NM_004778	<p>atgaatgggg tctcgaggg gaccagaggc tgcagtgaac ggcaacctgg ggtcctgaca A</p> <p>cgtgatcgct ctgtgtccag gaagatgaac tcttccggat gcctgtctga ggaggtggg</p> <p>tcctccgcgc cactgactgt ggttatactg tctgctgcca ttgctgctgg agtgcctggc</p> <p>aatgggctgg tgctgtggat gactgtcttc cgtatggcac gcacgtgttc caccgtctgc</p> <p>ttctccacc tggcccttgc cgatttcatg ctctcactgt ctctgcccc tgccatgtac</p> <p>tatatgtct ccaggcagtg gctcctcga gagtgggctt gcaactcta caccacctt</p> <p>gtgttctcga gctactttgc cagtaactgc ctctgtgtct tcatcttgtt ggacctgtg</p> <p>atctctgccc tctacccctg ctgggcccctg aaccaccgca ctgtgcagcg ggcgagctgg</p> <p>ctggcccttg ggtgtggct cctggccgc ctgtgtgtgt ctggcaccct gaaattcccg</p> <p>acaaccagaa aatggaatgg ctgtacgcac tgctacttgg cgttcaactc tgacaaatgag</p> <p>actgcccaga ttgggattga aggggtcttg gaggacaca ttatagggac cattggccc</p> <p>ttcctgtgg gcttctctgg gcccttagca atcataggca cctggcccca cctcatcccg</p> <p>gccaagctct tgcgggaggg ctgggtccat gccaacccgc ccaagaggct gctgctggg</p> <p>ctggtgagcg ctttctttat ctctgtgtcc ccgtttaacg ttgtgtctgtt ggtccatctg</p> <p>tggcgacggg tgatgctcaa ggaatctac cacccccga tctgtctcat cctccaggct</p> <p>agctttgccc tgggctgtgt caacagcgc ctaaacccct tctctacgt ctctgttggc</p> <p>agagatttcc aagaaaagt tttccagtct ttgacttctg cctggcgag ggcgtttgga</p> <p>gaggaggat ttctgtcatc ctgtccctg ggcaacgcc cccgggaatg a</p> <p>MNGVSEGRG CSDRQPGVLT RDRCSRKNM SSGCLSEEVG SLRPLTVVIL SASIVGVGLG P</p> <p>NGLVLMWTFV RMARTVSTVC FFHLALADEM LSLSLPIAMY YIVSRQWLLG EWACKLYTF</p> <p>VFLSYFASNC LLVFISVDRG ISVLYPVWAL NHRTVQRASW LAFGVWLLAA ALCSAHLKFR</p> <p>TTRKWNCGTH CYLAFNSDNE TAQIWIIEGVV EGHIIIGTIGH FLLGFLGPLA IIGTCAHLIR</p> <p>AKLLREGWVH ANRPRLLLV LVSAFFIWS PFNVLLVHL WRRVMLKEIY HPRMLLIQA</p> <p>SFALGCVNSS INPFYVFGV RDFQKEFFQS LTSALARAFG EEEFLSSCPR GNAPRE</p> <p>cagcctccct cttccacctc tgtctgccc tgctctcttg ctgcctctg gtcaggagct A</p> <p>gactgcctcc agggctggaa tctgtgtctc cctctgtgccc cagagcccca cgatgtcggc</p>	Homo sapiens

Receptor  
GPR44  
(CRTH2)

caacgccaca ctgaagccac tctgccccat cctggagcag atgagccgtc tccagagcca  
cagcaaacac agcatccgct acatcgacca cgcggccgtg ctctgcacg ggtggccctc  
gctgctgggc ctggtggaga atggagtcac cctcttcgtg gtgggctgccc gcatgcgcca  
gaccgtggtc accacctggg tgcctgacat ggcgtctgccc gacctgttgg cctctgcttc  
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gctgtgtttg agctctgcag ccaggggacc gaaaagtgg tgtcaatgaa ttttgccttg  
tggatgaaat gtcagtggaa gaagcagatg agaaactctt gagatcttgg tctgtgttt

486	160210 G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	MSANATLKPL CPILQMSRL QSHSNYSIRY IDHAAVLLHG LASLLGLVEN GVILFVVGCR P MRQTVVTWV LHLALSLLA SASLPFFTYF LAVGHSWEIG TTFCKLHSSI FFLNMFASGF LLSAISLDRC LQVVRPVMQ NHRTVAAAHK VCLVLWALAV LNTVPYFVFR DTISRLDGRI MCYNNVLLN PGPDRAICN SRQAALAVSK FLAFLVPLA I IASHAAVS LRLQHRGRR PGRFVRLVAA VAAAFALCWG PYHVFSLEA RAHANPGLRP LVWRGLPFVT SLAFFNSVAN PVLVLTCPD MLRKLRRSLR TVLESVLDD SELGGAGSSR RRRTSSTARS ASPLALCSRP EEPRGPALL GWLLGSCAAS PQTGPLNRAL SSTSS	Homo sapiens
487	160212 G Protein-Coupled Receptor GPR52	NM_005684	atgaatgaat ccaggtggac tgaatggagg atcctgaaca tgagcagtggt cattgtgaat A ggtccgagc gtcactcctg cccacttggg tttggccact acagtgtggt ggatgtctgc atcttcgaga cagtggttat tgtgttgctg acatttctga ttatgtctgg gaactaaca gttatctttg cctttcattg tgcctccatg ttacatcatt atactaccag ctatttcatt cagacgatgg catatgctga tcttttcgtt ggagttagct gcttggttcc tactctgtca cttctccact actccacagg tgtccacagg tcattaaact gccgggtttt tggatatatc atctcagttc taaaagtgt ttctatggca tgccttgctt gcatcagttg ggatcgttat cttgcaataa ccaagcctct ttctacaat caacttggtc ccccttgctg cttgagaaat tgcatatttt tgactctgat ctactcctgc ctaattttct tgccttccct ttttggtcgg gggaaacctg gttaccatgg tgacattttt gaatggtgtg ccacgtcttg gctcaccagt gcctatttta ctggctttat tgtttgctta ctttatgctc ctgctgcctt tgttgtctgc ttcacctact tccacatttt caaaatttgc cgtcagcaca ccaagagat aatgaccca agagccgat tccctagtca tgaggtagat tcttccagag agactggaca cagccctgac cgtcgctacg ccatggtttt gttaggata accagtgtat tttatatgct tgggtctccc tatataattt actttcttct agaaagctcc cgggtccttg acaatccaac tctgtccttc ttaacaaacct ggcctgcagt aagtaaatagt ttttgtaact gtgtaataata cagcctctcc aacggcgctt tccggctagg cctccgaaga ctgtttgaga caatgtgcac atcctgtatg tgtgtgaagg atcaggaagc acaagaaccc aaacctagga aacgggctaa ttcttgctcc attga	Homo sapiens
488	160212 G Protein-Coupled Receptor GPR52	NP_005675.1	MNESRWTEWR ILNMSGIVN ASERHSCPLG FGHYSVDVC IFETVVIVLL TFLIAGNLT P VIFAFHCAPL LHHYTSYFI QTMAYADLFV GVSCLVPTLS LHHYSTGVHE SITCRVFGYI ISVLKSVSMA CLACISVDRY LAITKPLSYN QLVTPCLRRI CIILLIWIYSC LIFLPSFFGW GKPGYHGDIF EWCATSWLTS AYFTGFIVCL IYAPAAFWVC FTYFHIFKIC ROHTKEINDR RARFPSHEVD SSRETGHSPD RRYAMVLFRI TSVFYMLWLP YIIFLLESS RVLDNPTLSF LTTWLAVSNS FCNCVIYSLN NGVFRIGLRR LFETMCTSCM CVKDQEAQEP KPRKRANSCS I	Homo sapiens
489	160217 G Protein-Coupled	NM_005683	atgagtcagc aaaaacaccag tggggactgc ctgtttgacg gtgtcaacga gctgatgaaa A accctacagt ttgcagtcca catccccacc ttgctctgg gcctgtcctt caacctgctg	Homo sapiens

Receptor GPR55			gcatccatg gcttcagcac cttccttaag aacaggtggc ccgattatgc tgccacctcc atctacatga tcaacctggc agtctttgac gtctgtctgg tgcctcctc cccattcaag atggctcctgt cccaggtaca gtcccccttc cggctcctgt gcacctgggt ggagtgcctt tacttcgtca gcatgtacgg aagcgtcttc accatctgct tcatacagcat ggaccgggtc ttggccatcc gttaccgct actggtgagc cactccggct cccaggaag atctttggga tctgcatgca caactgggt cctggtgagc accggaagca tccctatcta cagtttccat gggaaagtgg aaaaatacat gtgcttccac aacatgtctg atgatacctg gagcgccaa gtcttcttcc cgtggaggt gtttggttc ctccttccca tgggcatcat gggcttctgc tgctccagga gcatccacat cctgctgggc cgcgagacc acaccagga ctgggtgcag cagaaagcct gcatctacag catcgagcc agcctggctg tattcgtggt ctccttctc ccagtccacc tggggttctt cctgcagttc ctggtgagaa acagctttat cgtagagtgc agagccaaag agagcatcag cttcttcttg caattgtcca tgtgtttct caatgtcaac tgctgcctgg atgttttctg ctactacttt gtcatacaag aattccgcat gaacatcagg gccaccggc cttccagggt ccagctgggc ctgcaggaca ccacgatctc ccggggctaa MSQNTSGDC LFDGVNELMK TLQFAVHIPT FVLGLLLNLL AIHGFSTFLK NRWPDYAATS P IYMINLAVFD LLLVLSLPFK MVLSQVQSPF PSCLTIVECL YFVSMYGSVF TICFISMDRF LAIRYPLLVS HSGPPGRSLG SACTIWLVLW TGSIPYSEFH GKVEKYMCFH NMSDDTWSAK VFFPLEVFGF LLPMGIMGFC CSRSIHILG RRDHTQDWVQ QKACIYSIAA SLAVFVVSFL PVHLGFFLQF LVRNSFIVEC RAKQSISSFFL QLSMCFNSVN CCLDVFCYYF VIKEFRMNIR AHRPSRVQLV LQDTTISR	NP_005674.1	160217 G Protein- Coupled Receptor GPR55	Homo sapiens
			ctgtggctcc agcgacctca cctgggcccc agcgatcaag A atgaatggca cctacacac cgtgtgctcc ggcgtcctg cctgtgctg caacagcctg ctggctctct acgctactt cgcgtcctg cgcgatgcag cagtggacgg agaccgcgat ctacatgacc gcgctctggg tgtctgctg tggcgcacct ctgctgctg tgaccttgc cctctgctg gcactccctg aacctggcgg tggcgcacct ctgctgctg cgtgtgccag ctctccacgg gcatctacct gaccaacagg cgagacacct cagacacggc cagcgccatc cagcgccatc gctatgtggc cgtgcggcac tacctgagca tcagcctggt cagcgccctc gcggtcccc agcgagcctg cggcctgtg cgcggtcctc ccgctgcgtg cccgcgggct cctggtggtc cctggtggtc agctggctcc tggggattca ggaggcggc tggtgtctgg tcateggctc cgtgtggtg gcacaaattc aactccatgc ggttcccgct gctgggattc ttctgcttca ggagaccgc tggcctggt ggtcttctg tccctgaagg tggtagctgc cctggccccag tacctgcccc cgcacgtggg gcaggcagag gccaccgcga aggtgcccc catggtctgg aggccaccca cctggttctg ggtctgctc ctgccccctg acgtgggct gacagtgcgc gccaaacctc tgggttctg ggtctgctc ctgccccctg tccgtgcgc cctgtacata ctgcagtggt gctggaacgc ctgtgcccc ctggagacga tccgtgcgc cctgtacata accagcaagc tctcagatgc caactgctgc ctggagccca tctgtacta ctacatggcc aaggagtcc aggagcgctc tgcactggcc gtcgctcccc gtgctaaggc ccacaaaaagc caggactctc tgcgtgac cctgcctaa	NP_005292.1	160219 G Protein- Coupled Receptor GPR35	Homo sapiens
			NGTYNTCS SDLTWPAPK LGFYAYLGLV LVLGLLLNLS ALWVFCRMO QWTEIRYMT P NLAVADLCIL RDTLPFVLHSL RDTSDTCLQ LSQGIYLTNR YMSISLVTAI AVDRYVAVRH PLRARGLRSP RQAAAVCAVL WVIVIGSLVA RWLLIGIEGG FCFRSTRHNF NSMRFPLLGF YLPLAVWVFC SLKVVTAALQ RPPTDVGOAE ATRKAARMWV ANLLVFVVCF LPLHVLTVR LAVGWNACAL LETIRALYI TSKLSDANCC LDAICYIMA KEFQESALA VAPRAKAHKS			



493	160221 G Protein- Coupled Receptor GPR27	NM_018971	QDSLCLVTLA atggcgaaacg cgaagcgagcc gggtggcagc ggcgggcgccg agggggcgccg cctggggcctc A aagctgggcca cgctcagcct gctgctgtgc gtgagccctag cgggcaacgt gctgttcgcg ctgctgacgc tgcgggagcg cagcctgcac cgcgccccgt actacatgct gctcgacatg tgctggccg acgggctgcg cgcgtcgcc tgcctcccg cegtcacgt ggcggcgccg cgtgcggcg cgcggcgccg ggcgcccgcc ttctgtctgc tggcgctggg cgtcacccgc ctggccgcg tcttctgctt ccacgcgcc cgcgtctat gcagagcgc tggcgggctg gccgtgcgc tacctggcca tgcgcacca cgccttctat ctggggcgctg gcgctggccg cggccttccc gccagtctg gccatgctgg tgtgcgcgc gacggcgctg ggacgcgcg tgcgccccg agcagcgcc cgcggcgcc gacggcggtg gcgacgacga ggacgcgcg tgcgccccg agcagcgcc cgcggcgcc ccggcgccg tgggcttctt gctgctgctg gccgtggtg tggcgccac gcacctgctc tacctccgcc tgccttctt catccacgac cgcgcgaaga tgcggccgc gcgcctggtg ccggccgca gccacgactg gacctccac ggccccggcg ccacggcca ggcgccgc aactggacg cgggcttcg cgcgggcc cgcgtgcctg aagaattcaa gacggagaag gacggccgg cgcggcgcc cgcgcctc ctgctgctg aagaattcaa gacggagaag aggctgtca agatgttcta cgcgtcacg ctgctcttc cgcgtctg gggccctac gtcgtggcca gctacctggt ggctcgtg cgcggcgcc cgcgtcccc gccctacctg acggcctcg tgtggtgac ctgcgcgag gccggcata acccgctgt gtgcttctc ttcaacagg agctgaggga ctgctcagg gccagttcc cctgctgcca gagcccccg accacccag cgaccatcc ctgcgacctg aaaggcattg gtttatga MANASEPGGS GGSEAAALGL KLATLSLLC VSLAGNVLFA LLIVRSLH RPYLLLLDL P CLADGLRALA CLPAVMLAAR RAAAGAAP GALGCKLLAF LAALFCFHAA FLLLGVTGR YLAIAHREFY AERLAGWPCA AMLVCAAWAL ALAAAFPPVL DGGDEDEDAP CALEQRPDGA PGALGFLLL AVVVGATHLV YLRLLFFIHD RRMKRPALV PAVSHDWTFFH GPGATGQAAA NWTAGFGRGP TPPALVGIRP AGPGRGARRL LVLEEFKTEK RLCKMFYAVT LLFLLWGPY VWASYLRVLV RPAVPOAYL TASVWLTFQA AGINPVVCFI FNRRLDCFR AQFPCCQSPR TTQATHPCDL KGIGL	Homo sapiens
494	160221 G Protein- Coupled Receptor GPR27	NP_061844.1	atggtcctc acctctgtct gctctgtctc ctcccttgg tgcgagccac cgagccccac A gagggccgg cgcgagagca gagegcggag gcggccctgg cgtgccccaa tgcctcgccac ttcttctctt ggaacaacta cacttctcc gactggcaga acttctgtgg caggaggcg tacggcgctg agtccagaa cccacgggtg aaagccctgc tcattgtggc ttactcttc atcattgtct tctcactct tggcaacgtc ctggtctgtc atgtcatctt caagaaccag cgaatgcaact cggccaccag cctcttcac gtcaacctgg cagttgccga cataatgac acgctgctca acacccctt cacttgggtt cgttttga acagacatg gatattggg aaggcattg gccatgtcag cgccttggcc cagtactgt cactgcactg ctacgactg acactgacag ccattgcggt ggatgccac caggtcata tgcacccctt gaaacccgg atctcaatca caaagggtgt catctacatc gctgtcatct ggaccatggc tacgttctt tcaatccac atgtatctg catcaatca ttacattca aatacagtga ggacattgtg cgctccctct gctgcccaga ctccctgag ccagtgacc tctctggaa gtacctggac ttggccacat tcatctgtct ctacatctg cccctctca tcatctctgt ggcctacgt	Homo sapiens
495	160222 G Protein- Coupled Receptor GPR72	NM_016540	atggtcctc acctctgtct gctctgtctc ctcccttgg tgcgagccac cgagccccac A gagggccgg cgcgagagca gagegcggag gcggccctgg cgtgccccaa tgcctcgccac ttcttctctt ggaacaacta cacttctcc gactggcaga acttctgtgg caggaggcg tacggcgctg agtccagaa cccacgggtg aaagccctgc tcattgtggc ttactcttc atcattgtct tctcactct tggcaacgtc ctggtctgtc atgtcatctt caagaaccag cgaatgcaact cggccaccag cctcttcac gtcaacctgg cagttgccga cataatgac acgctgctca acacccctt cacttgggtt cgttttga acagacatg gatattggg aaggcattg gccatgtcag cgccttggcc cagtactgt cactgcactg ctacgactg acactgacag ccattgcggt ggatgccac caggtcata tgcacccctt gaaacccgg atctcaatca caaagggtgt catctacatc gctgtcatct ggaccatggc tacgttctt tcaatccac atgtatctg catcaatca ttacattca aatacagtga ggacattgtg cgctccctct gctgcccaga ctccctgag ccagtgacc tctctggaa gtacctggac ttggccacat tcatctgtct ctacatctg cccctctca tcatctctgt ggcctacgt	Homo sapiens

496	160222 G Protein- Coupled Receptor GPR72	NP_057624.1	<p> cgtgtggcca agaaactgtg gctgtgtaat atgattggcg atgtgaccac agagcagtagc  tttgccctgc ggcgcaaaaa gaagaagacc atcaagatgt tgaatgtggt gtagtctctc  tttgccctct gctggttccc cctcaactgc tacgtcctcc tctgtccag caaggtcctc  cgcaccaaca atgcoctcta cttgacctc cactgtttg ccatgagcag cactgtctat  aaccccttca tatactgtg gctgaacag aacttctaga ttgagctaaa ggcattactg  agcattgtgc aaagacctcc caagcctcag gagcagggc aacctcccc agttccttcc  ttcagggttg cctggacaga gaagaatgat ggccagagg ctcaccttg caataacctc  ctgccacct ccaactcca gctgggaag acagacctg catctgtga accattgtg  acgatgagtt agaagaggtt ggaagagggt agtggagggt gctgtcttcc acctgaggca  gggaaagaga gctattctc acacatgac ttccagagtg tggaaacaca ctctgcaga  aggctgtagg actcttgaat tcttaggaaa ctgtccagcc tcttagcccc atgtgatgtg  aaaactaaa ggcaccacca actagacatg tttcataaa ttccatcta agaaacatg  ggaggcacag cagcctgtat ctctgaggaa gagcagcag gacaacgttg gccagatgg  gggctgaatc attcaactgc ctccatctgt gggcagctg ctgcttaca gcccttccca  ctagactgag catccgaag gagacctaaa tcatctttg ggtgtgtga cccagatgca  cagagctctg cttgaacag gtacacggc cagggaatg ccagcaa  MVPHLLLLCL LPLVRATEPH EGRADEQSAE AALAVPNASH FFSWNNYTF S DWQNFVGRRR P  YGAESQNPV KALLIVAYSF IIVFSLEGNV LVCHVIFKNQ RMHSATSLFI VNLAVADIMI  TLNTPFTLV RFVNSTWIFG KGMCHVSRFA QYCSLHVSAL TLTALAVDRH QVIMHPLKPR  ISITKGVYI AVIWTMATEF SLPHAIQOKL FTFKYSIEDIV RSLCLPDFPE PADLFWKYLD  LATFILLYIL PLLIISVAYA RVAKKLWLCN MIGDVTTEQY FALRRKKKT IKMLMLVVVL  FALCWFLNC YVILLSSKVI RTNNALYFAF HWFAMSTCY NPFIYCWLINE NFRIELKALL  SMCQRPPKPQ EDGQSPVPS FRVAWTEKND GQRAPLANL LPTSQSQSGK TDLSSVEPIV  TMS </p>	Homo sapiens
497	160223 G Protein- Coupled Receptor G2A	NM_013345	<p> gggaggggtg cgaggctagc cagcagggcg gggccctggg tcattttaaa ctctcagagt A  gaactgttg ataggaccga caagacgcat gacatgtact tagatagctt atcttagagc  cacactgaga ttggaacccg caaaatatgc caggaggaa ggtgagcaag ggacacgaca  ctcaccgga taaccccaac aagcagcagc cgcctgtgg gaaacccgan cctgcacac  cgccggggga aggtggccn cgcaccac cgtggaaga cagcgggan gacccccag  agatgagacg gaactgccgt gagatccagc aatnccnact gtgggtctga cccaggatan  cgaaaagcag gacgtgaac agccctctc atgttcttga caccgtcatt ctccagcagct  cagctaaggc acagaggcag ccgagcgtct gtcagcagag tctgtgctga gcagaacacg  ccacacgcca cagccacac gccacacgtg caggattgct caagatggaa gggcacagtg  gaatatatat atatatatt attttggcg agaccttga ggacacactg aatacaatgg  aataccatcc cgccttga aggaaggaa atcctggcac acgctgcaac aggaggggagc  ttgaggacac tgtgtgtagt ggagcagtg agacacgaa ggacacacg tgaagacacg  cagagatgcc caccacgtg gggaggtgac agggagccc agccacaga gacaaagtgg  aatggaggcc tgggggctgg gagcaaatgc ggagcagagt ctctctgggg cagagtctcc  gtttgggaag atgagaaggt tctgcgacg gatgctggcg atggttgag aagaatgtga  atgtgccccaa tgctactgaa aaacggttac aatggaaacg ccacccagc gaccaccat  gccccgtgg cctccctggg cctctcggc agacactgca acaactgtc ctctgaagag </p>	Homo sapiens

498	160223	G Protein- Coupled Receptor G2A	NP_037477.1	agcaggatag tcttggtcgt ggtgtacagc gcggtgtgca cgtggggggg gccggcccaac tgctgactg cgtgggtggc gctgctgag gactgagc gcaactgtgt ggcgtgtctac ctgctctgc tggcactctg cgagctgctg tacacaggca cgtgccact ctgggtctac tatatccgca accagcacct ctggacccta ggcctgctg cctgcaaggt gaccgctac atcttcttct gcaacatcta cgtcagcctc ccttctctgt gctgcatctc ctgagaccgc ttcgtggccg tgggtgacgc gctggagagt cggggccgcc gccgcccagg gaccgccatc ctcatctccg cctgcatctt catctcgtc gggatcgtt actaccggt gtccagagc gaagacaagg agactgctt tgacatgctg cagatggaca gcagattgc cgggtactac tacgccaggt tcaccgttgg ctttgccatc cctctctcca tcatgcctt caccacccac cggattttca ggagcatcaa gcagagcatg ggcttaagcg ctgccagaa ggccaagggtg aagcactcgg ccactcgggt ggtgtgctc ttctagtct gcttgcctt gctaccctg gttctctcgt tcaagccgc tgccttttcc tactacagag gagacaggaa cgcctatgtg ggcttgagg aaaggctgta cacagcctct gtggtgttct tgtgctgtc cacggtgaac ggcgtggctg acccattat ctactgctg gccacggacc attcccgcca agaagtgtcc agaatccata aggggtggaa agagtgtcc atgaagacag acgtcaccag gctcaccac agcagggaca ccgaggagt gcagtcgcc gtggcccttg cagaccacta cacttctcc aggccctgc accaccagg gtcaccatgc cctgcaaaaga ggtgattga ggaatcctgc tgagcccat gtgtggcagg gggatggcag gttgggggtc ctggggccag caatgtggtt cctgtgcact gagccacca gccacagtgc ccatgtcccc tctggaagac aaactaccaa tttctcgtc ctgaagccac tccctcctg accactggcc ccangcttcc ccacatggaa ggtggtgca tggcaagggt aagagcgaca nctccagctt cccggagacc canagagcat gtggcangca gtggggcctc ttcatatca nctcgctg gctgctctt tggctgtggg cangtacacc cctgctggca gaagtacctg gtggctgccc tgttcgcatc agtggcgatg actttatttg cggagcattt ctgcaagcgt tgctgggatg cgggtgtgca ttgtgggccc tctgggctcc tgcctcaaaa tgtcagttag caccatgctg gaagtaccca tcaactgtggc agcggccagg aaggcatagg gcancctacc acctccaang gggcangcgc cctcatctgg ggttgggt	SRIVLVVYVS AVCTLGVPAN P YIRNQHRWTL GLLACKVTAY LISACIFILV GIVHYPVFQT RIFRSIKQSM GLSAAQKAKV GLEERLYTAS WFLCLSTVN SRDTEELQSP VALADHYTFS	Homo sapiens
499	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NM_004767	cggttacagg gggcccaaga gctgggctgg ctgtctctctg ctcatccagc catgcggtgg A ctgtggcccc tggctgtctc tcttctgtg attttggctg tggggctaaag cagggtctct gggggtgccc cctgtcacct gggcaggcac agagccgaga cccaggagca gcagagccga tccaagaggg gcaccagga tgaggaggcc aagggcgtgc agcagtatgt gcctgaggag tgggcggagt accccggcc cattcacct gctggcctgc agccaaccaa gcccttgggtg gccaccagcc ctaaccccca caaggtagg ggcaccccca acagtggcca ggaactgagg ggcaatctga cagggggcacc agggcagagg ctacagatcc agaaccctt gtatccgggtg	ctcatccagc catgcggtgg A tggggctaaag cagggtctct cccaggagca gcagagccga aagggcgtgc agcagtatgt gctggcctgc agccaaccaa ggcactgagg ggaactgagg agaaccctt gtatccgggtg	Homo sapiens

500	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NP_004758.1	<p>accgagagct cctacagtg cctacagtg ctagccatc atgcttctg cgtggtggtg gtttgcggtg ggcattgtg gcaacctgtc ggtcatgtg acagtacta cctgaagagc ctttctctg gctggaact ccatccttg cagcttgcc tctggttct tctggttct ctttctctg ctcctattg tcatcttcaa cagatcacc aagcagagg tactgggtga cgttcttctg cgtgccgtg ccttcatgga ggtctctct ctaggagtc cgaactttcag cctctgtg ctggcattg accgttcca cgtggccacc agcacctgc ccaaggtgag gcccacag cgtgccaat ccatcctggc caagtgtgct gtcattctg tgggtccat gacgtggt gtgctgagc tctgtctgtg gcagtggca caggagcctg cccccaccat gggcaccctg gactcatgca tcatgaaacc ctcagccagc ctgcccagc cctgtattc actggtgatg acctaccaga agcccgcct ggtggtgtac ttggtgctg acttctgct gcccacctc ttcacagtca cctgccagc ggtgacatg cgggtgcgag gccctccag gaggaagtc gagtgcagg ccagcaagca cagcagtgat gagagccag tcaacagcac cgtggtggc ctgaccgtg tctagcctt ctgacccct ctagagacc ctagcaacat cgtggtggc tacctctcca ctagctgac ccgccagacc ctgacccct tgggacctc caaccagtc tccacctct tcaaggcgc catcaccca gtgctgtct ttgcatctg caggccgtg ggcaggcct tctggactg ctgctgtctg tctgtctgt aggagtgcg cgggctctg gaggcctctg ctgccaatg gtcggacaac aagctcaaga ccgaggtgtc ctctccatc tacttccaca agcccaggga gtcaccccca ctctgcccc tgggacacac ttgctgaggc cccagtagg gtgggaggg agggagagg cggcaccct gctgtgtct gctgtctct ccccatagt cttgttctg tgcctgtct gctgtctag gatgacttg gttctctctg tcaaggttg ggaatccg</p>	Homo sapiens
501	160225	Sphingolipid Receptor Edg6	NM_003775	<p>gagtcagccc ccgggggagg ccatgaacgc cacggggacc ccggtggccc ccgagtcctg A ccaacagctg gcggccggcg ggcacagcg gctcattgt ctgcactaca accactcggg ccggctggcc ggcccgggg ggccggaggga tggcgccctg ggggcccctg cggggtgtc ggtggccgc agctgcttg tgggtctgga gaacttgctg gtgctggcg ccataccag ccacatgcg tgcgacgt ggtctacta ttgctggtg aacatcacgc tgagtgaact gtcacgggc gggcctacc tggccaact gctgtgtct cctgtcttc accgccctg ggcgcccgcc cagtgttcc tacgggagg cttgtcttc accgccctg ccgctccac cttcagcctg ctcttactg caggggagc ctttgccacc atggtggcg cgggtggcga gagcggggc accaagacca gccgctcta cggcttcat cggctgtgct ggctgtggc cgcgtgctg gggatgctg cttgtctgg ctaggaactg cgtggtgct ttgaccgtg ctccagcct ctgccctct actccaagc ctacatctc ttctgctgg tgatcttgc</p>	Homo sapiens

502	160225	Sphingolipid NP_003766.1	Receptor Edg6	<p> cggcgctctg gccaccatca tgggacctta tggggccatc ttcggcctgg tgcaggccag  cgggcagaag gcccacgccc cagcgccccg ccgcaaggcc cgcgcctgc tgaagacggg  gctgatgac ctgctggcct tcttggtgtg ctggggccca ctctggggc tgcgtctggc  cgactcttt ggctccaaac tctgggcccga ggagtacatg cggggcatgg actggatcct  ggccctggcc gtctcaact cggcggtcaa cccatcatc tactcttcc gcagcaggga  ggtgtgcaga gccgtgctca gcttctctg ctgcgggtgt ctcggcctgg gcatgcgagg  gccgggggac tgcctggccc gggccgtcga ggctcactcc ggagcttcca ccaccgacag  ctcttgagg ccaagggaca gcttctcgcg ctcccgctcg ctcagcttcc ggatgcggga  gcccctgtcc agcatctcca gcgtgcggag catctgaagt tgcagctctg cgtgtggatg  gtgcagccac cgggtgcgtg ccaggcaggc cctcctgggg tacaggaagc tgtgtgcacg  cagcctcgcc tgtatgggga gcagggaacg ggacaggccc ccatggtctt cccggtggcc  tctcggggct tctgacgcca aatgggcttc ccatggtcac cctggacaag gaggtaacca  ccccacctcc ccgtaggagc agagagcacc ctggtgtggg ggcgagtggt tccccacaac  cccgcttctg tgtgattctg gggaagtccc gcccctctc tgggctctcag tagggctccc  aggctgcaag gggtggaactg tgggatgcat gccctggcaa catggaagt cgatcatggt  aaaaa </p>	Homo sapiens
503	160228	T-Cell Death-Associated Gene 8 (GPR65)	NM_003608	<p> atgaacagca catgtattga agaacagcat gacctggatc actatttgtt tccattgtt A  tacatcttg tgattatagt cagcattcca gccaatattg gatctctgtg tgtgtcttc  ctgcaaccca agaaggaaag tgaactagga atttacctct tcagttgtc actatcagat  ttactctatg cattaaactc cctttatgg attgattata ctggaaataa agacaactgg  actttctctc ctgccccttg caaaggaggt gctttctca tgtacatgaa gttttacagc  agcacagcat tctcacctg cattgccgt gatcggtatt tggctgtgtg ctacccttg  aagttttttt tcttaaggac aagaagaatt gcactcatgg tcagcctgtc catctggata  ttggaaaacca tcttcaatgc tgtcatgttg tgggaagatg aaacagttgt tgaatattgc  gatgccgaaa agtctaattt tactttatgc tatgacaaat accctttaga gaaatggcaa  atcaacctca acttggtcag gacgtgtaca ggctatgcaa taccttttgt caccatcctg  atctgtaacc ggaagtcta ccaagctgtg cggcacaata aagccacgga aaacaaggaa  aagaagagaa tcataaaact acttgtagc atcacagtta ctttgtctt atgctttact  ccctttcatg tgatgtgtgt gattcgtgc attttagagc atgctgtgaa cttcgaagac  cacagcaatt ctgggaagcg aacttacaca atgtatgaa tcacggttgc attaacaagt  ttaaattgtg ttgtgtatcc aattctgtac tgttttgtta ccgaacagg aagatatgat  atgtggaata tattaaaatt ctgcactggg aggtgtaata catcaaaa acaaaagaaa  cgcatacttt ctgtgtctac aaaagatact atggaattag aggtccttga gtag </p>	Homo sapiens

504	160228	T-Cell Death- Associated Gene 8 (GPR65)	NP_003599.1	MNSTCIEEQH DLDHYLFPIV YIFVIVISIP ANIGSLCVSF LQPKKESELG IYLFSLSLSD P LLYALTPLW IDYTWNKDNW TFSALCKGS AFLMYMKFYS STAFLTCTIAV DRYLAVVYPL KFFFLRTRI GMAVLSIWI LETIFNAVML WEDETAVEYC DAEKSNFTLC YDKYPLEKWQ INLNLFRTCT GYAIPLVIL ICNRKVYQAV RHNKATVKE KRRIKLLVS ITVTFVLCT PFHVMILLIRC ILEHAVNPFED HSNHGKRTYT MYRITVALTS LNCVADPILY CFTVETGRYD MWNILKFCTG RCNTSQRQK RILSVSTKDT MELEVL	Homo sapiens
505	160300	Encephalopsi n	NM_014322	cgagcccg cgcaagctga ggcctccgc cgcgcagcg cgccggcgcc gggccatgta A ctcggggaac cgcagcgcg gccacggcta ctgggacggc ggccggggcg cggcgctga ggggccggcg cggcgggga cactgagccc cgcgccccctc ttacgccccg gcacctacga gcgcctggcg ctgctgctgg gctccattgg gctgctggcg gtcggcaaca acctgctggt gctcgtctc tactacaagt tccagcggt cgcgactccc actcacctcc tccctggtaaa catcagctc agcagcctgc tgggtgctcc ctccggggtc accttaacct tctgtctctg cctgaggaac ggctgggtgt gggacacgt gggctgctg tgggacgggt ttacggcgag cctcttcggg attgtttcca ttgccacct aacctgctg gctatgaac gttacattcg cgtggtccat gccagagtga tcaattttc ctgggctgg agggccatta cctacatctg gctctactca ctggcgctgg caggagcacc tctcctggga tggaaacaggt acatccctga cgtacacgga ctaggctgca ctgtggactg gaaatccaa gatgcaacg attcctcct tgtgcttttc ttattcttg gctgctggt ggtgccccctg ggtgctcatg cccattgcta tggccatatt ctatattcca ttcgaaatgct tctgtgtgtg gaagatcttc agacaattca agtgatcaag attttaaaat atgaaaagaa actggccaaa atgtgctttt taatgatatt caccttctctg gctgtgtgga tgccttatat cgtgatctgc tcttgggtgg ttaatggta tggtcacctg gtcactccaa caatatctat tctttogtac cctttgtcta aatcgaacac tgtatacaat ccagtgattt atgtcttcat gatcagaaa tttcgaagat ccttttgca gcttctgtgc ctccgactgc tgaggtgcca gaggcctgct aaagacctac cagcagctgg aagtgaatg cagatcagac ccattgtgat gtcacagaaa gatggggaca ggccaaagaa aaaagtgact ttcaactctt ctccatcat ttttatcat accagtgatg aatcacgtgc agtgacgac agcgacaaaa ccattgggt ccaagtttg atgttaatcc agttctctc tttgtaggaa tgaaggatgg caacgaaaag tggggcctta aattggatgc cacttttgga cttcatcat cctcctgaag aagaagtgc tggaaatccc gttctatgta atatcaacag aaccttgggt tccagcagga aatccgaatt gccatatgc tcttggcct caggaaagag ttgaacaaa acaattctt ttaattcaac ggtgcttta cataatgaaa aaaccacttg tgcacacgat ggcatctaa catcatcat tctaatgtg ttggagattt tcatttcaaa tatattttt aaattactct attttccaaa acacgtaatg cactttctc gaaaatacct tactgtaaaa ataactgtcg cgtacacatg tgtgaagtag ctgaacata ctgaattttt tttgactgt tggactctat tcagtgtcat gtcctatatc tgatcaagtt atcaaggaga taattctaga atgaaaaaga aaatcctctt gttgaaaaa aaagacgttt tatatgtga gtatgacaaa gaggagtttc agagacaact ttgaatcctt gtcagcctgg agaccagcac cagaggaatc tacaaggcaa actcccatat atttgcctcc cccaaattgc tgccttaca gactcaaaag tcttttctt tgtttgttg tttctctaaa aatttactgt tctttgtcga tgctatataa gccagggagt tctaaagcgc cagctcttg agattgtctc attccccgt attcccaaca tatatattac atataccgc taataaattt atgtttgtt taaaaaaa	Homo sapiens

506	160300 Encephalopsi n	NP_055137.1	aaaaaaaa	MYSGNRSGGH LVLYLYKFKQ GSLFGIVSIA LDVHGLGCTV IQVTKILKYE NTVYNPVIYV KKKVTFNSSS	GYWDGGGAAG RLRTPHLLL TLTVLAYERY DWKSKDANDS KKLAKMCFILM FMIRKFRSL IIFIITSDS	AEGPAPAGTL VNISLSDLV IRVWHARVIN SFVLFELGCG IFTFLVCMWP LQLLCLRLR LSVDDSDKTI	SPAPLESPGT SLFGVTFTFV FSWAWRAITY CYGHILYSIR YIVICFLVAN CQRPADLPA GVQSLMLIQV	YERLALLGS SCLRNGWVWD IWLYSLAWAG MLRCVEDLQT SIVSYLFAKS VMSQKGDGRP	P Homo sapiens
507	160312 Sphingolipid Receptor Edg5	NM_004230	atgggcagct accaaggaga gtcatcctct aacagcaagt ctggcaggcg ttcagcctcc ggcagcgaca gtcctcgggtg atgtcctcgc atcctgttgg gctgacatgg gtctttatcg gtccactcct tccctgctca cgcccgctgc ccgggccacc cccacgtcac	tgtactcgga cgctggaac gttgcgccat tccactcggc tggccttcgt tgcccatcgc agagctgcgc gcctgcccac ctctctacgc ccatcgtggc cgcccccgca tctgtggctt gcccgccttc ctacacgtgg accccgatcct ccacgttctt	gtacctgaac gcaggagacg tgtggtggaa aatgtacctg agccaatacc ccgggagggc cattgagcgc catgcttctg ccttggtcgg caagcattat cctgtacgtg gacgctagcc gcccgcttc ctacaaagcc ctacacgtgg gcccgccttc gaggggggtg actccgcagc ggagggcaac	ccccaaagg acctccgcgc aaccttctgg ttcttgggca ttgtctctcg tctgcttcca tcacgtcttc ctcatcgggg aactgcctgg gtgctgtgcg cgcatctact ctgtccaaga cggtcaccat tctggacta tcgcgtcttc caccctgaat gagcgccgg gacggaggcg tgagagggg ga	ctataattat ggccttcac tgctcatg gctcgtcac tcacgtcttc tgccaaagt cctcgtggct gccacctga tggtgacct gcgtgtccg cggtcaccat ttctggacta tcgcgtcttc caccctgaat gagcgccgg gacggaggcg tgagagggg catgcacatg	A Homo sapiens	
508	160312 Sphingolipid Receptor Edg5	NP_004221.1	MGSLYSEYLN NSKFHSAMYL FSLIAIAIER TVLPLYAKHY VFIVCWLPAP RPLQWRPGV	FLGNLAASDL HVALIAVKLY VLCVVTIFSI SILLLDYACP GVQRRRVGT	TKETLETQET LAGVAFVANT GSDKSCRMLL ILLAIAIALY VHSCPILYKA PGHLLPLRS	TSRQVASAFI LLGSVTLRL LIGASWLISL RIYCVVRSSH HYFFAVSTLN SSSLERGMHM	VILCCAIVE TPVQWFAREG VLGGLPIIGW ADMAAPQTLA SLLNPVIYTW PTSPFFLEGN	NLLVLIAR SASITLSASV NCLGHLEACS LLKTVTIVLG RSRDLRREVL TVV	P Homo sapiens
509	160314 G Protein- Coupled Receptor GPR103	AF411117	atgatctgct ggcattgtat gcccaactgc acagcaatgc aacctgacgc gagctgccgg gcactctttg gtcaccaca	gcagtgctct tagcaaatc gggaaatgt aggcgcttaa gggagcagtt gacgcgcaa gcaatgctct tccttatctg	gagccctagg atcactagac taggcgcctg cattaccccc catcgctctg gctggccctc gtgttctac ctccttgccg	attcatcttt atcgctactac cattgcggtg gagcagttct taccggctgc gtgtcaccg gtggtgaccc ctcagtgacc	tagcctgact ctacgttgta ccgggagcgc ctcggtgct gcgggacac ctacacccca cttcgccccg catgcagacc cttcttctgc	A Homo sapiens	

510 160314 G Protein- ENSMPRT2217 53  
 Coupled  
 Receptor  
 GPR103

Homo  
 sapiens

atccccgtca ccattgtcca gaacatttcc gaaactggc gacaaactggc tgggggggtgc tttcatttgc  
 aagatgggtgc catttgtcca gtctaccgt gtgtgacag aaatcctcac tatgacctgc  
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 gaagtcaaat tgtgtgaaca gacagaggag aagaaaaagc tcaaacgaca tcttgccttc  
 tttaggtctg aactggctga gaattctcct ttagacagt ggcattaa  
 MKIKYDFLYE KEHICCLEEW TSPVHQKIYT TFIILVILFL PLMVMLILYS KIGYELWIKK P  
 RVGDGSLRT IHGKEMSKIA RKKKRAVINM VTVVAFVC WAPFHVHMM IEYSNFEKEY  
 DDVTIKMIFA IVQIIGFSNS ICNPIVYAFM NENFKKNVLS AVCYICVNKT FSPAQRHGNS  
 GITMRKKAK FSLRENPEVE TKGEAFSDGN IEVKLCEQTE EKKXLRHLA LFRSELAENS  
 PLDSG

511 160317 Neuropeptide NM\_004885  
 FF 2  
 Receptor

Homo  
 sapiens

tctggagcca agtaatgggtg atactgatgc ttccttttct ttgcgcgcgt cggattctga A  
 gtttcacaag aatgtacctg ggtgcccctt agcgggatat gaatagcttc ttcggaaccc  
 cagcgccag ctggtgcttc ctggaagtgc agctctcat tgcacccgac aaggaggcgg  
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512	160317	Neuropeptide NP_004876.1	MNSFFGTPAA	SWCLES	DVS	SAPDKEAGRE	RRALSVQQRG	GPWMSGLEW	SRQSGDRRR	P	Homo sapiens
		FF 2	LGLSRQTAKS	SWSRSRDRTC	CCRRAWWILV	PAADRARRER	FIMNEXWDTN	SEENWHPIWN			
		Receptor	VNDTKHHLYS	DINITYVNY	LHQPVAAIF	IISYFLIFFL	CMNGTVVCF	IVMRNKHMT			
			VTNLFILNLA	ISDLLVGIFC	MPITLLDNII	AGWPFNGTMC	KISGLVQGIS	VAASVFTLVA			
			IAVDRFQCVV	YFPKPKLTIK	TAFVIIMIIV	VLAITIMSPS	AVMLHVQEEK	YVRVRLNSQN			
			KTSPVWCRE	DWPNQEMRKI	YTTVLFIANY	LAPLSLIVIM	YGRIGISLFR	AAVPHTRGRKN			
			QEQWHVVRK	KQKIIKMLLI	VALLFILSWL	PLWTLMLMSD	YADLSPNELQ	IINIYIYFPA			
			HWLAFGNSSV	NPIYGFNE	NFRRGFQEAF	QLQLCQKRKAK	PMEAYTLKAK	SHVLINTSNQ			
			LVQESTFQNP	HGETLYRKS	AEKPOQELVM	BEIKETTNSSEI					
513	160324	G Protein-Coupled Receptor GPR86/GPR94/P2Y13	NM_023914								Homo sapiens
			atcagatattt	tccttttcaa	cacatcttata	gaaagtgttg	gataaatgca	ggatgttaat	A		
			atgctataaaa	cataaagtct	gtttttaaaa	aataagctatt	gaaaatcatg	aaggcctttt			
			tgctttcttt	tgctttgata	tatgtttatt	ggtaacaggt	gacactggaa	gcaatgaaca			
			ccacagtgtat	gcaaggcttc	aacagatctg	agcgggtgcc	cagagacact	cggatagtac			
			agctgggtatt	cccagccctc	tacacagtgg	ttttcttgac	cggcatcctg	ctgaataactt			
			tggtctctgtg	gggtgttgtt	cacatcccca	gctcctccac	cttcacatc	tacctcaaaa			
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			cacacctggc	accctggcag	ctcagagctt	ttgtgtgtcg	ttttcttctg	gtgatatattt			
			atgagaccat	gtatgtgggc	atcgtgctgt	tagggctcat	agcctttgac	agattcctca			
			agatcatcag	acccttgaga	aatatttttc	taaaaaaac	tgcttttgca	aaaaacgtct			
			caatcttcat	ctggttcttt	ttgttcttca	tctccctgcc	aaatatgac	ttgagcaaca			
			aggaagcaac	accatcgtct	tgaaaaagt	gtgcttctt	aaagggcct	ctggggctga			
			aatggcatca	aatggttaaat	aacatatgcc	agttattttt	ctggactgtt	tttatcctaa			
			tgcttggtgtt	ttatgtgggt	attgcaaaaa	aagtatatga	ttcttataga	aagtcacaaa			
			gtaaggacag	aaaaaacac	aaaaagctgg	aaggcaaat	atttgtgtc	gtggctgtct			
			tccttggtgtg	ttttgctcca	tttcattttg	ccagagtcc	ataactcac	agtcacacca			
			acaataagac	tgactgtaga	ctgcaaaatc	actgtttat	tgctaaagaa	acaactctct			
			ttttggcagc	aactaacatt	tgatggatc	ccttaataata	catacttcta	tgtaaaaaat			
			tcacagaaaa	gctaccatgt	atgcaaggga	gaaagaccac	agcatcaagc	caagaaaaat			
			atagcagtca	gacagacac	ataaccttag	gctgacaaat	gtacataggg	ttactttcta			

514	160324	G Protein-Coupled Receptor GPR86/GPR94/ P2Y13	NP_076403.1	<p>tttattgatg agacttcogt agataatgtg gaaatcaaat ttaaccaaga aaaaaagatt  ggaacaaatg ctctottaca tttattatc ctggtgtaca gaaagatta tataaaattt  aaatccacat agatctattc ataagctgaa tgaaccatta ctaagagaat gcaacaggat  acaaatggcc actagaggtc attatttctt tctttctttt tttttttttt aatttcaaga  gcatttcact ttaacatttt ggaagaagact aaggagaaac gtatatccct acaaacctcc  cctccaaaac ccttctcaca tttctttcca caattcacat aacactactg cttttgtgcc  cctlaaatgt agatatgtgc tgaagaagaaa aaaaaagcc caactcttga agtccattgc  tgaaaaactgc agccagggtg tgaagggtg gcagacttga agagtctgag gaactgaagt  gggtcagcaa gacctctgaa atcctgggta aaggattttc tctttacaat tacaacacgc  ctctttcaca ttacaataat ataccatagg aggcacaagc accattatta agccactttg  cttacacctt aagtgtgtac aattcaagt tgagaatgct gtgttaacta tctttggaa  ttctccttct gtccagcaaa tactctaag atggttaaac atggcaccta ctcagcaaatg  ccttccctga ccacaacccc tatcccccgt cccacccctc ctcatataaa acaaatactt  ctactgtttg ggtgtgtgat aggtttctca atgcagatct cccctttcta gttagctata  ttcttgactg catcgctaa aaatgttaaa gcttcttgag agacagacat gccagatttt  cttggatatc cccataatc gacctacagt ccatggtcta cagatgtttt aaatagaatt  gctattctcg atacatacaa agacgtaatt gctgacccac aatcagtaac atccatattg  ggagattttt caaaggatgg tgacctgct tgtatttatt taccttggtta tttttcttg  catcttctg tgattcaaaa aagtaaaatg tggctttctg aaatgatgga taagagtcta  catcttctag aaaaaataca taaaggagta gtttaagctct gtaaatgtgc cagagactcc  aacacgacca tctgtaggtg aagcccactg tttcttccat ggcctcaaa gctcagaac  ttgcctacct tcttggcctt acctcctagc tacttatcca tctcttgaac tttatactct  tgtataaatt tctaactttc agaaaatgcc atactctgtt ttggcaccac acatgtatat  ttccccctgg tacacttggga agactcttat ccatctgtga aacctatgt tgtcatcact  tgggtccatga aataatacct ggccaatc ccaaccatcac ctcaaaaccca atcaccccc  cctctgtatg ctgtcacacc tatattatta aacttatcac attgcatgtg aattacttcc  tgacctttgt atctactctt ttagtaactg atgtatatat ctgaaaggag agattgttcc  attgtgcaat caataaatgt ttgataaaat aaagccc</p>	IPSSSTFIY P	Homo sapiens
515	160329	Proteinase-Activated Receptor 4	NM_003950	<p>ctccacacggg ctggctggca agcggccctg gtgggtctgc gggggcaggg gcagccttcc A  tggtttatct ccacggcgc gatctgctcg tccgcctcgg ctccagaagc tggggctcag  gggtccggga ggcaggaagc ctgaggccac agcccagagc agcctgagtg cagtcagtgtg  ggggcgactg ctctgtggc cctgtgtgct ggggttcagc ctgtctggcg gcacccagac  ccccagctc tacgacgaga cggggagcac cggaggtggt gatgacagca cgccctcaat  cctgcctgcc ccccgggct acccaggcca agtctgtgcc aatgacagtg acacccctgga  gctcccgga agctcacggg cactgcttct gggctgggtg cccaccaggc tgggtccgcg</p>	TLG	Homo sapiens

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516	160329	Proteinase- Activated Receptor 4	NP_003941.1	<p> tggggctggg gctgcattcc ctggagactc actgcaagtt cctgcccagg aggctgaggg  caccatcc tcagtgcaca atgctgtggc ccaccaggc ccagagcctg gttggccatt  ctcatgcca ccagcttctg gctttgggat gtctcttgag caaccagaat agcaccacca  actctgtcc ccaaaaccca tcaactagcac ggtctagcct cctgctatcc cctgactgct  gggagacctc gccttccctc ctctcacctc caggctgac cttcttttca ctttctgtca  atgtcacca ggataaggtg ggacaatggg ggggtggggg ggacagtgtg tgctgggggg  ttcgggtgct gcagacctgg aactcccttc tgccaggatg ttggcagcgg gttgtaagcc  ttgcacggga cagaccacac ccaccgcaac ctcatccctt cagcactaac cacatccact  ctcaaccccg tcccttctgc actgaccaca ccaaccccg tggcccccgc ccccgcaact  gaacactccc gccctcaacc ccgacacctc cgcactcacc tccccctgc cgtcagacc  cgccctcacc aactgacca cctcaacacc attgcgcca gtcccacca cagtgaccac  accctcactg gctcggccct gcccacagta tactgacct tcccagcca ctcccttcc  gcaactacca ctccccagc cagccctc cccgtgacc gctcctccag ccccgctcc  ccgtacagg cagagcgccc gccacctct atgctgctt ctcctgactt tacgttgccc  cctcctctgc caagccccc gggagacct cctggcgctc caggggtggg agtcgggggtg  tggcaggcgg cgtggggggg cggcagtgcc tccgcgact caccgggccc cgggcaggg  gcgcgtcca ctctgttga cgcgggtccg gcgcacagt cccgggagag tgggctgtgc  gtgctgact tgtagaagcg agtgccctc aggtctacag gacaggggtg gcgggtgacc  aagtgcagg cgcacgggtc agggaccggg ccgggcccgg ggtcggggcg cgcgggacct  ccgggttctg agtagtcgta caccgagact ggcagcgccg agtctctgcc caccacgcac  tccggagag caccggaacc caccgacgtc aggcacggc tggggtatctg tggggcagcg  gcgggcgag gctcgaaccg ggcagaggg aacagggcgc tgcgtcagg ccagaaactg  gctgatttca gggataccca ggacgcgtga aacagagaag aaactgac ccatcttctt  ttttctttt actttcttt ttttttttt ttctgagac agagtctgc gctgttgccc  aggctggagt gcagtggcgt gatctcggt cactgcaagc tgggctcctt gggttcaaat  gattctctg cctcagcctc ccaagtagt gggataacag gcgccacca ccgacacctg  ctaatTTTT gtatttttga tcaagacgga gtttcacct gttggccagg ctggtctcca  actcctgccc tcaagtgatc cgcctcggtc ccatttttta ttcttgggt ccttccatcc  cactgggaaa acgtctcagg tggcctctga aacaccactc ctttttgtt gttgacgc  atggctgagc atgtgtgggt gggagtcaag acattcaga tactgtgaa tcatcactc  tgtctagtt caggacgggt tcttctccc ccaagaaaac ccatcgcca tcagcactca  ctcccaactc cccagcccc tggcaaccac aaatctttcc aacttaagg atttgctgt  tctgggcatt tcatgtcaat ggaatcatgt actctgtgaa aaaaaaaa aaaaaaaa  aaaaaaa aaaaaaaa aaaaaaaa aaaa  MWGRLLIWPL VIGFSLSGGT QTPSVYDESG STGGDDSTP SILPARGYP GOVCANDSDT P  LELPDSSRAL LLGWVPTRLV PALYGLVLV GLPANGALW VLATQAPRLP STMLMLLAT  ADLLALALP PRIAYHLRGQ RWPFGAACP LATAALYGHM YGSVLLAAV SLDRYLALVH  PLRARALGR RLALGLCAA WLMALALP LTQRQTFRL ARSDRLCHD ALPLDAQSH  WQPAFTCLAL LGCFLPLLAM LLCYGATLHT LAASGRRYGH ALRLTAVLIA SAVAFFVPSN  LLLLLHYS DPSPAWNLYG AYVPSIALST LNSCVDPIY YYVSAEFRDK VRAGLFQSP  GDTVASKASA EGGSRGMGTH SLLQ </p>	Homo sapiens
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517	160330 G Protein- Coupled- Receptor TM7XN1/GPR56	NM_005682	cggcagcagg gtctcgctct gtccacacagg ctggagtgca gtgggtgtgat cttgggtcat A cgtaacctcc acctcccggt ttcaagtgtat tctcatgcct cagcctcccg agtagctggg attacaggtg gtgacttcca agagtgtact agtgaggga aaatgactcc ccagtcgctg ctgcagacga cactgttctt gctgagttctg ctcttctctg tccaagtgtc ccacggcagg ggccacaggg aagacttttcg cttctgcagc cagcggaaac ccacacacag gagcagcctc cactacaaac ccacaccaga cctgcgcac tccatcgaga actccgaaga ggcctcaca gtccatgcc ctttccctgc agccaccct gcttccgat ccttccctga cccaggggc ctctaccact tctgctctta ctggaaacga catgctggga gattacatct tctctatggc aagcgtgact tcttctgtag tgacaaagcc tctagcctcc tctgcttcca gcaccaggag gagagcctgg ctacaggccc cccgtgtta gccacttctg tccactcctg gtggagcctt cagaacatca gccgtccag tgcgccagc ttacacttct ccttccacag tcttccccac acggccgctc acaatgcctc ggtggacatg tgcgagctca aaaggacct ccagctgctc agccagttcc tgaagcatcc ccagaaggcc tcaaggaggc cctcggtgc ccccgccagc cagcagttgc agagcctgga ctgaaactg accctgtga gattcatggg ggacatgggt tcttcgagg aggacggat caacgccag gtatggaaagc tccagccac agcggcctc caggacctgc acatccact ccggcaggag gaggagcaga gcgagatcat ggagtactcg gtgtgtctgc ctgaaacact ctccagagg acgaaaggcc ggagcgggga ggctgagaag agactcctcc tgggtgactt cagcagccaa gccctgttcc agacaagaa tccagccaa gtcctgggtg agaaagtctt ggggattgtg gtacagaaca ccaagtagc caacctcag gagccctggg tgcctacttt ccagcaccag ctacagccga agaattgtac tctgcaatgt gtgttctggg ttgaagacct cacattgagc agcccggggc attggagcag tgcctgggtgt gagaccgtca ggagagaac caaacatcc tgcttctgca accacttgac ctactttgca gtgtgtatgg tctcctcggt ggaggtggac gccgtgcaca agcactacct gagcctcctc tctacgtgg gctgtgtgt ctctgccctg gccctgcttg tccactatgc cgcctacctc tgctccaggg tgccctgccc gtgcaggagg aaacctcggg actacacct caagggtgcac atgaacctgc tgctggcctg ctctcctgctg gacacgagct tctgtctcag cgagccggtg gccctgacag gctctgaggc tggctgccga gccagtgcc tcttccctga ctctcctcg ctcactgcc tttcctggat gggcctcgag gggtacaacc tctaccgact cgtgggtggag gtctttggca cctatgtccc tggtacctta ctcaagctga gcgccatggg ctggggcttc cccatcttc ttgtgacgtt ggtggccctg gtggatgtgg acaactatgg ccccatcatc ttggctgtgc ataggactcc agaggcgctc atctacctt ccatgtgtg gatccgggac tccctggta gctacatcac caacctgggc ctcttcagcc ttgtgtttct gtccaacatg gccatgctag ccacatggt ggtgcagatc ctgcggctgc gccccacac ccaaaagtgg tcacatgtgc tgacactgct gggcctcagc ctggtccttg gccctgctg ggccttgatc ttcttctct ttgcttctgg cacttccag cttgtcgtcc totacctttt cagcatcatc acctcctcc aaggcttctt catcttcatc ttgtactggt ccattgggt gcaggcccg ggtggccctt cccctctgaa gagcaactca gactgcgcca gctcccat cagctcggc agcactcgt ccagccgcat ctaggcctcc agccacctg ccatgtgat gaagcagaga tgcgccctcg tcgcacactg cctgtggccc ccagaccag gcacgcccga ggcagtcag ccgcagactt tggaaagccc aacgacctg gagagatggg ccgttgccat ggtggacgga ctccggggc tggggctttt gaattggcct tggggactac tcggctctca ctacgtccc	Homo sapiens
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518	160330 G Protein- Coupled- Receptor TM7XN1/GPR56	NP_005673.1	<p>acgggactca gaagtgcgcc gccatgctgc ctaggggtact gtccccacat ctgtcccaac</p> <p>ccagctggag gccctggtctc tccttacaac cccctggggc agccctattg ctggggggcca</p> <p>ggccttggtat ctgaggggtc tggcacatcc ttaactctgt gccctgcctt gggacagaaa</p> <p>tgtggctcca gttgctctgt ctctgtgtgt caccctgagg gcaactgtga tcctctgtca</p> <p>ttttaacctc agtgggcacc cagggcgaat gggggccagg gcagaccttc agggccagag</p> <p>ccctggcgga ggagaggccc ttggccagga gcacagcagc agctgccta cctctgagcc</p> <p>cg</p>	Homo sapiens
519	160387 Glucagon- Like Peptide 2 Receptor	NM_004246	<p>MT PQSLLQTT LFLSLFLV QGAHGRGHR DFRFCQRNQ THRSLSHYKP TPDLRISIEN P</p> <p>SEALTVHAP FPAHPASRS FPDPRGLYHF CLYWNHRAGR LHLLYGRDF LLSDKASSLL</p> <p>CFQHQEESLA QGPPLIATSV TSWSPQNIS LPSAASFTFS FHSPHTAAH NASVDMCELK</p> <p>RDQLLSQFL KHPOKASRRP SAAPASQQLQ SLESKLTSVR FMGDMVSFEE DRINATVWKL</p> <p>QPTAGLQDLH IHSRQEEQS EIMEYSVLLP RTLFQRTKGR SGEAEKRLLL VDFSSQALFQ</p> <p>DNSSQVLGE KVLGIVQNT KVANLTPVV LTFQHQLOPK NVTLQCVFV EDPTLSSPGH</p> <p>WSSAGCETVR RETQTSFCFN HLTIFYAVLMV SSVEVDVHK HYLSSLVYVG CWSALACLV</p> <p>TIAAYLCRV PLPCRKRPRD YTIKVHMLL LAVFLDTSF LLSEPVALTG SEAGCRASAI</p> <p>FLHFSLLTCL SWMGLEGYNL YRLVVEVFGT YVPGYLLKLS AMWGEPFIFL VTLVALVDVD</p> <p>NYGPIILAVH RTPEGVIYPS MCWIRDSLVS YITNLGLFSL VFLENMAMLA TMVQILRLR</p> <p>PHTQKWSHVL TLGLSLVLG LPWALIFFSF ASGTFQLVVL YLFSIITSFQ GLFIFIWYS</p> <p>MRLQARGGPS PLKNSDCAR LPISSGSTSS SRI</p> <p>atgaagctgg gatgagcag ggcaggcct gggagaggaa gcgcgggact cctgcctggc A</p> <p>gtccacgagc tgcctatggg cctccctggc cccctggggg cagctcctct cctctccac</p> <p>agaaagtgc ctctctgggc cctctggagg cctctccca cctctgctct gctgggttcc</p> <p>atcaagcaag ttacaggatc cctccctggg gaaacgactc ggaagtgggc tcagtacaaa</p> <p>caggcatgtc tgagagactt actcaaggaa cctctgggca tatttgtaa cgggacattt</p> <p>gatcagtagc tgtgttgccc tcattctctt cctggaaaatg tctctgtacc ctgcccttca</p> <p>tacttacctt ggtggagtga agagagctca ggaaggcct acagacactg cttggctcag</p> <p>gggacttggc agacgataga gaaagccacg gatatttggc aggatgactc cgaatgctcc</p> <p>gagaaccaca gcttcaagca aaacgtggac cgttatgctt tctgtcaac cttgcagctg</p> <p>atgtacacccg tgggatactc ctctctctct atctccctct tcttggtctt caccctctc</p> <p>ttgtttcttc gaaaactcca ctgcacgcgc aactacatcc acatgaactt gtttgcttct</p> <p>ttcatcctga gaacctggc tgtactggtg aaggacgtcg tcttctacaa cttctactcc</p> <p>aagaggcctg acaatgagaa tgggtgggatg tcctacctgt cagagatgtc cacctcctgc</p> <p>cgtcagctcc aggttctctt gcattacttt gtgggtgcca attacttatg gctgctggtt</p> <p>gaaggcctct acctccacac gctgctggag cccacagtgc tctctgagag gcggtgtgg</p> <p>cccagatacc tgcgtgtggg ttgggcccctt cctgtgctat ttgtgtacc ctggggttcc</p> <p>gcccggtcac acctggagaa cacagggtgc tggacaacaa atgggaataa gaaaatctgg</p> <p>tggatcatcc gaggacccat gatgctctgt gtaacagtca attcttcat cttctctgaaa</p> <p>attctcaagc ttctcatctt taagctcaaa gctcatcaaa ttgtcttcag agattataa</p> <p>tacagattgg caaaatcaac actggtcctc attcctttat tgggcgttca tgagatcctc</p> <p>ttctctttca tcaatgatga tcaagttgaa ggatttgcaa aactatagc acttttcat</p> <p>cagttgacac tgagctcctt tcatgggttc ctggtggcct tgcagtatgg ttttgccaat</p>	Homo sapiens

520	160387 Glucagon-Like Peptide 2 Receptor	NP_004237.1	<p> ggagaagtga aggtgagct gcggaataac tgggtccgct tcttgtagc ccgccactca  ggctgcagag cctgtgtcct ggggaaggac ttccggttcc taggaaatg tcccaagaag  ctctcggaag gagatggcg tgagaagctt cggaagctgc agccctcact taacagtggg  cggctcctac atctagccat gcgaggtctt ggggagctgg gcgccagacc ccaacaggac  catgcacgct ggcgccgggg cagcagcctg tccgagtgca gtgaggggga tgtcaccatg  gccaacacca tggagagat tctggaagag agtgagatct ag  MKLGSSRAGP GRGSAGLPG VHELPMGIPA PWGTSPLSFH RKCSLWAPGR PFLTLLVLS P  IKQVTGSLLE ETTRKWAQYK QACLRLDKE PSGIFCNGTF DQYVCWPHSS PGNVSVPCPS  YLPWSEESS GRAYRHCLAQ GTWQTIENAT DIWDDSECS ENHSFKQNV D RYALLSTLQL  MYTVGYSFSL ISLFLALTLL LFLRKLHCTR NYIHMNLFAS FILRTLAVLV KDWFYNSYS  KRPDNEGWM SYLSEMSTSC RSVQVLLHYF VGANYLWLLV EGLYLHLL E PTVLPERRLW  PRYLLGWAF PVLFFVVPWGF ARAHLENTGC WTTNGNKKIW WIIRGNMMLC VTNVFFIFLK  ILKLLISKLK AHQMCERDYK YRLAKSTLV LPLGVHEIL FSFTDDQVE GFAKLIRLFI  QLTLSSFHGF LVALQYGFAN GEVKAELRY WRFLLARHS GCRACVLGKD FRFLGKCPKK  LSEGDGAELK RKLPQSLNSG RLLHLAMRGL GELGAQPQOD HARWPRGSSL SECSEGDVTM  ANTMEEILEE SEI </p>	Homo sapiens
521	160388 Latrophilin-1	NM_014921	<p> ttttttttt ttttttct aatttttgggt cggcgggcgt gctgggccag gggaaggag A  ggacacggag gcgcctctg tccgcacc tctaccgcg tcccccag ccccgctcc  ggagatgtg ccggcgggg ggcggggtt cgccagaccg caggagagac agctgggcc  gacccagag aggcgtgga caggctgtg gtccaggcgt ggtgctgc caggtgatgt  ggggcaagc ccccgaca ggcactgag agctcgag acgcaccgg ctgccaccat  ggccgccta cccgagtg cctggaatct gttgtcac gccgtcctgg tcacctggc  caccaggc ctgagccgg cgggctccc gtccggctg atgcggggg agctggcgtg  tgaaggctac cccatcgag tgcggtgcc cggcagcag gtcacatgg tggagaatgc  caactacgg cgacggag acaagattg cgatgctgac ccttccaga tggagaatgt  gcagtgtac ctgcccag ccttcaagat catgtcac aggtgtaaca accgcacca  gtcgtggtg gtcccggt cggatgcct tctgacccc tgcctggga cctacaagta  cctggaggtg cagtacgact gtgtcccta caaaggtag cagaaagtct tctgtgccc  aggaccctg cagaaggtg tggagcccag tgcgacacac gactcagagc accagtctgg  cgatggtg aaggaccgc tgcaggcggg tgaccgcac tactgatgc cctggatccc  ctaccgcag gacacactga ctgagtatgc ctggtggag gactacgtgg ccgcccggca  caccaccac taccgctgc ccaaccgct gtagggcaca ggctttgtgg tctacgatgg  tgccgtcttc tacaacaagg agcgacgcg caacatcgtc aagtatgacc tacggacgcg  catcaagagc ggggagacgg tcatcaatac cgccaactac catgacacct cgcctaccg  ctggggcgga aagaccgaca ttgacctggc ggtggacgag aacgggctgt ggtcatcta  cgccactgag ggcaacaacg ggcggctggt ggtgagccag ctgaacccct acacactgcg  ctttgagggc agtgggaga cgggttacga caagcgtcg gcatccaaacg ccttcattgt  gtgtgggtc ctgtacgtcc tgcgtccgt gtacgtggat gatcagcag aggcggctgg  caaccgctg gactatgcct tcaacaccaa tgccaaccgc gaggagcctg tcagcctcac  cttccccaac cctaccagt tcatctctc cgttgactac aacctcgcg acaaccagct  gtacgtctgg acaactatt tctgtgtgctg ctacagcctg gacttcgggc cgcccagccc </p>	Homo sapiens

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522

160388 Latrophilin- NP\_055736.1

1

P

Homo

sapiens

523 160390 Cadherin EGF NM\_001408  
 IAG Seven-  
 Pass G-Type  
 Receptor 2  
 (CELSR2)

NGVVKWFIL YNNLGLFLST ENATVKLAGE AGPGGPGGAS LVNSQVIAA SINKESSRVF  
 LMDPVIFTVA HLEDKNHFNA NCSFWNYSER SMLGYWSTQG CRLVESNKTTH TTCACSHLTN  
 FAVLMAHREI YQIRINELL SVITWVGIVI SILVCLAICIS TFCFLRLGLQT DRNTIHKNL  
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 SRTKYYLGG YCFPALVVGI AAADYRSYG TEKACALRVD NYFIWSFIGP VSFVIVNLV  
 FLMVTLHKMI RSSSVLKPDS SRLDNIKSWA LGAIALLLFLL GLTWAFGLLF INKESVVMAY  
 LFTTFNAFQG VFIFVFHICAL QKKVHKEYSK CLRHSYCCIR SPPGGTHGSL KTSAMRSNTR  
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 RDSLYASGAN LRDSPPYPDS SPEGPSEALP PPPPAPGPP EIYYTSRPPA LVARNPLQGY  
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Homo  
 sapiens

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524	160390	Cadherin EGF NP_001399.1	LAG Seven-Pass G-Type Receptor 2 (CELSR2)	Homo sapiens
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160397 latrophilin- NM\_012302

525

2

Homo  
sapiens

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SEQ ID NO:	Gene	Source ID	LPID	Peptide	SpeciesName
692	5-HT1A Receptor	P08908	595	CAPASFERKNERNAEAKRKM	Homo sapiens
693	5-HT1A Receptor	P08908	608	GRIFRAARFRIRKTVKVE	Homo sapiens
694	5-HT1A Receptor	P08908	610	RTPEDRSDPDACTISK	Homo sapiens
695	5-HT1A Receptor	P08908	612	RHGASAPQPKKSVNGE	Homo sapiens
696	5-HT1B Receptor	P28222	585	KQTPNRTGKRLIRAQLITD	Homo sapiens
697	5-HT1B Receptor	P28222	586	SPGSTSVTSINSRVPD	Homo sapiens
698	5-HT1B Receptor	P28222	588	KVRVSDALLEKKLMA	Homo sapiens
699	5-HT1B Receptor	P28222	599	ANLSSAPSQNCsAKD	Homo sapiens
700	5-HT1D Receptor	P28221	577	IKLADSALERKRISAA	Homo sapiens
701	5-HT1D Receptor	P28221	588	QEASNRSLNATETSEA	Homo sapiens
702	5-HT1D Receptor	P28221	589	RIYRAARNRILNPPSL	Homo sapiens
703	5-HT1D Receptor	P28221	590	KAQEEMSDCLVNTSQIS	Homo sapiens
704	5-HT1E Receptor	P28566	815	RHLSNRSTDsQNSFASC	Homo sapiens
705	5-HT1E Receptor	P28566	817	CTEASMAIRPKITEKM	Homo sapiens
706	5-HT1E Receptor	P28566	818	DNDLDHPGERQGISST	Homo sapiens
707	5-HT1E Receptor	P28566	2738	CVSDFSTDPTTEFEK	Homo sapiens
708	5-HT1E Receptor	P28566	2739	RIYHAAKSLYQKRGSSR	Homo sapiens
709	5-HT1F Receptor	P30939	604	ESGEKSTKSVSTSVVL	Homo sapiens
710	5-HT1F Receptor	P30939	606	DKCKISEEMSNFLAWLG	Homo sapiens
711	5-HT1F Receptor	P30939	864	IAKEEVNGQVLLEGE	Homo sapiens
712	5-HT1F Receptor	P30939	869	STVRSLSRSEFKHEKSWR	Homo sapiens
713	5-HT2A Receptor	CAA01675.1	1106	DAFNWTVDSERNLNLS	Homo sapiens
714	5-HT2A Receptor	CAA01675.1	1107	FGLQDDSKVKEGSC	Homo sapiens
715	5-HT2A Receptor	CAA01675.1	1108	PGSYTGRRTMGsISNEQKAC	Homo sapiens
716	5-HT2A Receptor	CAA01675.1	1109	CSMVALGKGHSEEAASKDNSD	Homo sapiens
717	5-HT2A Receptor	CAA01675.1	1110	NTIPALAYKSSQLQMGQ	Homo sapiens
718	5-HT2B Receptor	P41595	1111	KGIEDVDNPNNITC	Homo sapiens
719	5-HT2B Receptor	P41595	1112	CSSPEKVAMLDGSRKDKA	Homo sapiens
720	5-HT2B Receptor	P41595	1113	RTSTIGKKSVQTISNE	Homo sapiens
721	5-HT2B Receptor	P41595	1114	CNYRATKSVKTLKRSSK	Homo sapiens
722	5-HT2B Receptor	P41595	1187	SGLQTESIPEEMKQIVEEQG	Homo sapiens
723	5-HT2C Receptor	P28335	1115	CKRNTAEEENSANPNQDQNA	Homo sapiens
724	5-HT2C Receptor	P28335	1116	GHTEEPPLSLDFLK	Homo sapiens
725	5-HT2C Receptor	P28335	1117	CNYKVEKKPPVRQIPRV	Homo sapiens
726	5-HT2C Receptor	P28335	1118	IGLRDEEKVFVNITC	Homo sapiens

727	134	5-HT2C Receptor	P28335	1119	RHTNEPVIEKASDNEP	Homo sapiens
728	134	5-HT2C Receptor	NP_000859.1	1826	RNAVHSLVHLIGLLVWQCD	Homo sapiens
729	134	5-HT2C Receptor	NP_000859.1	1829	CDISVSPVAIVTDIFNTSD	Homo sapiens
730	134	5-HT2C Receptor	NP_000859.1	1830	DGGRFKFPDGVQNWPAIS	Homo sapiens
731	136	5-HT4 Receptor	CAA73107.1	654	NINIGIDUEKRKFNQ	Homo sapiens
732	136	5-HT4 Receptor	CAA73107.1	655	ESRQSDAQHSTHRMR	Homo sapiens
733	136	5-HT4 Receptor	CAA73107.1	656	CDDERYRRPSILGQTVP	Homo sapiens
734	136	5-HT4 Receptor	CAA73107.1	657	RDAVECGGQWESQCHPPATS	Homo sapiens
735	136	5-HT4 Receptor	CAA73107.1	2682	TAKEHAHQIQLQRAGASSESRP	Homo sapiens
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739	136	5-HT4 Receptor	CAA73107.1	2686	TAKEHAHQIQLQR	Homo sapiens
740	138	5-HT6 Receptor	P50406	649	RTPRPGVESADSRRLATK	Homo sapiens
741	138	5-HT6 Receptor	P50406	650	CPRRQASLASPSLRIS	Homo sapiens
742	138	5-HT6 Receptor	P50406	652	PLFMRDFKRALGRFLPC	Homo sapiens
743	138	5-HT6 Receptor	P50406	653	RAAAAVNFFNIDPAEPE	Homo sapiens
744	139	5-HT7 Receptor	P34969	658	EVTASAPTWDAPPDNASGC	Homo sapiens
745	139	5-HT7 Receptor	P34969	659	KAARKSAKHKFGFRVE	Homo sapiens
746	139	5-HT7 Receptor	P34969	660	CANLSRLKHERKNISIFKR	Homo sapiens
747	139	5-HT7 Receptor	P34969	663	KLAERPERPEFVLRAC	Homo sapiens
748	272	Adenosine A1 Receptor	AAA17544.1	8	CHKPSILTYIAFLT	Homo sapiens
749	272	Adenosine A1 Receptor	AAA17544.1	9	NGSMGEPVVKCEFEKVISME	Homo sapiens
750	272	Adenosine A1 Receptor	AAA17544.1	10	NKKVSASSGDPQKYGKELK	Homo sapiens
751	272	Adenosine A1 Receptor	AAA17544.1	11	NDHFRQCQPAPIDEDLPEER	Homo sapiens
752	272	Adenosine A1 Receptor	P25099	286	CQPKPIDEDLPEEKAED	Rattus norvegicus
753	272	Adenosine A1 Receptor	P25099	302	QPKPIDEDLPEEKAED	Rattus norvegicus
754	272	Adenosine A1 Receptor	AAA17544.1	303	MPPSISAFQAAYIGIEVLJ	Homo sapiens
755	273	Adenosine A2a Receptor	P29274	1237	QGNTGLPDVELLSHELKGVG	Homo sapiens
756	273	Adenosine A2a Receptor	P29274	1238	MPIMGSSVITVELAIA	Homo sapiens
757	273	Adenosine A2a Receptor	P29274	1239	RSHVLRQGEFFKAAGT	Homo sapiens
758	273	Adenosine A2a Receptor	P11617	1240	RIREFRQTRKIRSH	Canis familiaris
759	274	Adenosine A2b Receptor	P29275	676	KDSATNCTEPWDGTTNES	Homo sapiens
760	274	Adenosine A2b Receptor	P29275	677	CRQLQRTELMDHSRITLQRE	Homo sapiens
761	274	Adenosine A2b Receptor	P29275	678	RNRDFRYTFHKISRYLLC	Homo sapiens
762	274	Adenosine A2b Receptor	P29275	679	CQADVKSNGNGQAGVQP	Homo sapiens

763	274	Adenosine A2b Receptor	P29275	680	CVTLFQPAQGKPKW	Homo sapiens
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765	275	Adenosine A3 Receptor	P33765	683	IFYIIRNKLSLNSNSKE	Homo sapiens
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767	275	Adenosine A3 Receptor	P33765	687	AYKIKFKETYLILKAC	Homo sapiens
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769	275	Adenosine A3 Receptor	P33765	2296	KRVTHRRRWLALGLC	Homo sapiens
770	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	4	CPRVVLPEEIFFTIS	Homo sapiens
771	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	5	MGYLKPRGSFETTADDIIDS	Homo sapiens
772	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	6	RYHSIVTMRRTVAVLT	Homo sapiens
773	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	7	AFRSPELRDAFKKMIFC	Homo sapiens
774	376	Alpha 1d-adrenoceptor	AAA35496.1	12	RSTRSLSEAGVKRERGKASE	Homo sapiens
775	376	Alpha 1d-adrenoceptor	AAA35496.1	13	KEVPDPDERFCGITEEAG	Homo sapiens
776	376	Alpha 1d-adrenoceptor	AAA35496.1	14	RSTEMVQRLRMEAVQ	Homo sapiens
777	376	Alpha 1d-adrenoceptor	AAA35496.1	15	PRPSCAPKSPACRTRSP	Homo sapiens
778	377	Alpha 1b-adrenoceptor	P35368	696	KEMNSKELTLRIHSK	Homo sapiens
779	377	Alpha 1b-adrenoceptor	P35368	697	GGSLERSQSRKDSLDDSGSC	Homo sapiens
780	377	Alpha 1b-adrenoceptor	P35368	698	APEPPGRRGRHDSGPL	Homo sapiens
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782	379	Alpha 1c-adrenoceptor	AAA93114.1	1245	GSGMASAKTKHFSVR	Homo sapiens
783	379	Alpha 1c-adrenoceptor	AAA93114.1	1246	RIPVGSRETFYRISKTDGVC	Homo sapiens
784	379	Alpha 1c-adrenoceptor	AAA93114.1	1247	SSMPRG-SARITVSKDQSSC	Homo sapiens
785	379	Alpha 1c-adrenoceptor	AAA93114.1	1248	ESRGLKSGLKTDKSDS	Homo sapiens
786	387	Alpha 2a-adrenoceptor	P08913	1343	ERRPNGLGPERSAGPG	Homo sapiens
787	387	Alpha 2a-adrenoceptor	P08913	1344	PGEAPAGPRDIDL	Homo sapiens
788	387	Alpha 2a-adrenoceptor	P08913	1345	RGPRGKGKARASQVKPGD	Homo sapiens
789	387	Alpha 2a-adrenoceptor	P08913	1346	RGPGATGIGTPAAGPGE	Homo sapiens
790	387	Alpha 2a-adrenoceptor	P08913	1347	RVGAAKASRWGRQNRE	Homo sapiens
791	388	Alpha 2b-adrenoceptor	P18089	1348	YKGDQGPQPRGRPQC	Homo sapiens

792	388	Alpha 2b-adrenoceptor	P18089	1349	RSNRRGPRAKGGPGQGE	Homo sapiens
793	388	Alpha 2b-adrenoceptor	P18089	1350	ASAREVNGHSKSTGEK	Homo sapiens
794	388	Alpha 2b-adrenoceptor	P18089	1351	RGVGAIGGGQWRRRAH	Homo sapiens
795	389	Alpha 2c-adrenoceptor	P18825	1352	RAPVGPDGASPTENG	Homo sapiens
796	389	Alpha 2c-adrenoceptor	P18825	1353	RTGTARPRPPTWSRTR	Homo sapiens
797	389	Alpha 2c-adrenoceptor	P18825	1354	ASRSPGPGGRLSRASS	Homo sapiens
798	389	Alpha 2c-adrenoceptor	P18825	1355	RSVEFFLSRRRRARSSVC	Homo sapiens
799	599	Bradykinin B1 Receptor	P46663	798	PMASGRQQRRRQARVTC	Homo sapiens
800	599	Bradykinin B1 Receptor	P46663	799	NYHILASLRTREEVSR	Homo sapiens
801	599	Bradykinin B1 Receptor	P46663	800	RVRGPKDSKTALILT	Homo sapiens
802	599	Bradykinin B1 Receptor	P46663	801	VGRLFRTKVWELYKQC	Homo sapiens
803	600	Bradykinin B2 Receptor	AAB02793.1	794	FRITMKEYSDEGHNVAC	Homo sapiens
804	600	Bradykinin B2 Receptor	AAB02793.1	795	CTMQIMQVLRNNEMQKKE	Homo sapiens
805	600	Bradykinin B2 Receptor	AAB02793.1	796	CQDERIIDVITQIASFM	Homo sapiens
806	600	Bradykinin B2 Receptor	AAB02793.1	797	CRSEPIQMENSMTLRTS	Homo sapiens
807	635	Beta-1 adrenoceptor	AAA51667.1	1357	RVFREAGKQVKIDSC	Homo sapiens
808	635	Beta-1 adrenoceptor	AAA51667.1	1358	CERRFLGGPARPPSPS	Homo sapiens
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812	635	Beta-1 adrenoceptor	AAA51667.1	1362	CNGGAAADSDSLDEP	Homo sapiens
813	640	Beta-2 adrenoceptor	NP_000015.1	2654	KRQLQKIDKSEGRFHV	Homo sapiens
814	640	Beta-2 adrenoceptor	NP_000015.1	2656	GEQSGYHVEQEKENKLLC	Homo sapiens
815	640	Beta-2 adrenoceptor	NP_000015.1	2662	APNRSHAPDHDVTQQR	Homo sapiens
816	640	Beta-2 adrenoceptor	NP_000015.1	2663	VPLVMVFVSVRFQE	Homo sapiens
817	643	Beta-3 adrenoceptor	P13945	1390	RGELGRFPPEESPAP	Homo sapiens
818	643	Beta-3 adrenoceptor	P13945	1391	SRS LAPAPVGTCAPE	Homo sapiens
819	643	Beta-3 adrenoceptor	P13945	1392	GVPACGRRPARLLPRE	Homo sapiens
820	643	Beta-3 adrenoceptor	P13945	1393	PSGVPAAARSSPAQRPLC	Homo sapiens
821	688	Opsin, blue-sensitive	NP_001699.1	1753	EEEFYLFKNISSVGPWDGPQ	Homo sapiens
822	688	Opsin, blue-sensitive	NP_001699.1	1754	CGPDWVTVGTYRSEST	Homo sapiens
823	688	Opsin, blue-sensitive	NP_001699.1	1755	NNRNHGLDLRLVTIPS	Homo sapiens
824	688	Opsin, blue-sensitive	NP_001699.1	1756	IMKMVCGKAMTDESDT	Homo sapiens
825	692	Bombesin Receptor	AAA35604.1	20	SITNDTESSSVVSNIDNTNK	Homo sapiens
		Subtype-3				
826	692	Bombesin Receptor	AAA35604.1	21	KAVVKPLERQPSNAILKTC	Homo sapiens
		Subtype-3				

827	692	Bombesin Receptor Subtype-3	AAA35604.1	22	RDPNKNMTFESCTSPVSKK	Homo sapiens
828	692	Bombesin Receptor Subtype-3	AAA35604.1	23	RTLYKSTLNIPTTEQSHARK	Homo sapiens
829	692	Bombesin Receptor Subtype-3	AAA35604.1	24	KSFQKHFKAKQLFCCKAERPE	Homo sapiens
830	692	Bombesin Receptor Subtype-3	NP_001718.1	2286	NKGWSGDNSPGIEALC	Homo sapiens
831	692	Bombesin Receptor Subtype-3	NP_001718.1	2287	QRQPHSPNQTLUSTINDTE	Homo sapiens
832	692	Bombesin Receptor Subtype-3	NP_001718.1	2288	RPEPPVADTSLTLAV	Homo sapiens
833	692	Bombesin Receptor Subtype-3	NP_001718.1	2289	SEISVTSFTGCSVKQAEDR	Homo sapiens
834	729	CXC Chemokine Receptor 5	P32302	1382	ELDRLDNYNDTSLVENHLC	Homo sapiens
835	729	CXC Chemokine Receptor 5	P32302	1383	SQGHNNSLPRCTFSQE	Homo sapiens
836	729	CXC Chemokine Receptor 5	P32302	1384	CYVGWVHRLRQAQRPP	Homo sapiens
837	729	CXC Chemokine Receptor 5	P32302	1385	CQLFPSWRRSSLSSENA	Homo sapiens
838	735	C-C Chemokine Receptor 1	P32246	305	TEDYDTTEFDYGDATPC	Homo sapiens
839	735	C-C Chemokine Receptor 1	P32246	1242	ASMPGLYFSKTQWEFTHTC	Homo sapiens
840	735	C-C Chemokine Receptor 1	P32246	1243	CSLHFPHESLREWKLFQA	Homo sapiens
841	735	C-C Chemokine Receptor 1	P32246	1244	TILSVFQDFLTHEC	Homo sapiens
842	737	C-C Chemokine Receptor 3	P51677	1386	CSALYPEDTVYSWRHF	Homo sapiens
843	737	C-C Chemokine Receptor 3	P51677	1387	PEFIFYETEELFEETLC	Homo sapiens
844	737	C-C Chemokine Receptor 3	P51677	1388	SSYQSILFGNDCERSK	Homo sapiens
845	737	C-C Chemokine Receptor 3	P51677	1389	GRYIPFLPSEKLRTS	Homo sapiens
846	737	C-C Chemokine Receptor 3	P51677	1751	DDVGLLCEKADTRALMAQFV	Homo sapiens
847	738	C-C Chemokine Receptor 4	P51680	306	MNATEVIDTIGDETVMNSY	Mus musculus
848	738	C-C Chemokine Receptor 4	P51679	348	DESISNVYLYESIPKPC	Homo sapiens
849	738	C-C Chemokine Receptor 4	P51679	351	DTPSSSYTGSTMDHDLHD	Homo sapiens
850	738	C-C Chemokine Receptor 4	P51679	353	LETLVEVLQDDCTFE	Homo sapiens
851	738	C-C Chemokine Receptor 4	P51679	491	RNHITYCKTKYSLNSTWK	Homo sapiens
852	741	C-C Chemokine Receptor 7	P32248	748	CQDEVTDDYIGDNTTVD	Homo sapiens
853	741	C-C Chemokine Receptor 7	P32248	846	PELLYSDLQIRSSSEQAMRC	Homo sapiens
854	741	C-C Chemokine Receptor 7	P32248	847	QLRQWSSCRHIRRSMISVE	Homo sapiens
855	741	C-C Chemokine Receptor 7	P32248	848	GVKFRNDLFLKLDLGC	Homo sapiens
856	742	C-C Chemokine Receptor 8	P51685	359	PDFSSPCDAELUQTNG	Homo sapiens

857	742	C-C Chemokine Receptor 8	P51685	360	KILHQLKRCQNHNTKAIR	Homo sapiens
858	742	C-C Chemokine Receptor 8	P51685	362	SQIFNYLGRQMPRESC	Homo sapiens
859	742	C-C Chemokine Receptor 8	P51685	493	FVGEKFKHLSEIFQKSC	Homo sapiens
860	752	CXC Chemokine Receptor 3	P49682	1371	ENFSSSYDYGENESDSC	Homo sapiens
861	752	CXC Chemokine Receptor 3	P49682	1372	CYAHILAVLLVSRGQRRRLRA	Homo sapiens
862	752	CXC Chemokine Receptor 3	P49682	1373	MVLEVSDHQVLNDAEVAALL	Homo sapiens
863	752	CXC Chemokine Receptor 3	P49682	1374	CPNQRGLQRQPSSRRD	Homo sapiens
864	753	CXC Chemokine Receptor 4	P30991	1376	TEEMGSGDYDSMKEPC	Homo sapiens
865	753	CXC Chemokine Receptor 4	P30991	1377	KKLRSMITDKYRLHLSVAD	Homo sapiens
866	753	CXC Chemokine Receptor 4	P30991	1380	CLISKLSHSGHGHQKRKALK	Homo sapiens
867	753	CXC Chemokine Receptor 4	P30991	1381	KILSKGKRGGHSSVSTE	Homo sapiens
868	755	Complement Component 3a Receptor 1	AAC50657.1	25	ENRSLLENIVQPPGEMNDRLD	Homo sapiens
869	755	Complement Component 3a Receptor 1	AAC50657.1	26	KIPSGFPIEDHETSPLDNSD	Homo sapiens
870	755	Complement Component 3a Receptor 1	AAC50657.1	27	RKKARQSIQIGILEAAFSEE	Homo sapiens
871	755	Complement Component 3a Receptor 1	AAC50657.1	28	PQTFQRPSADSLPRGSARLT	Homo sapiens
872	758	Complement Component 5a Receptor 1	P21730	811	DLNTPVDKTSNLTLPD	Homo sapiens
873	758	Complement Component 5a Receptor 1	P21730	812	CGVDYSHDKRRERAVAIVRL	Homo sapiens
874	758	Complement Component 5a Receptor 1	P21730	813	CYFILLRTWSRRRATRSTK	Homo sapiens
875	758	Complement Component 5a Receptor 1	P21730	814	QGRRLRKSLSLLRNVLTE	Homo sapiens
876	767	Calcitonin Receptor-like Receptor	Q16602	841	AELESPEDSIQLGVTR	Homo sapiens
877	767	Calcitonin Receptor-like Receptor	Q16602	843	EFVLIPWRPEGKIAEEV	Homo sapiens
878	767	Calcitonin Receptor-like Receptor	Q16602	844	RRNWNQYKIQFGNSFSNSE	Homo sapiens
879	767	Calcitonin Receptor-like Receptor	Q16602	845	RSASYTVSTISDGPYGSHDC	Homo sapiens
880	832	Cannabinoid Receptor 1	AAB18200.1	29	NDIQYEDIKGDMAKLG	Homo sapiens
881	832	Cannabinoid Receptor 1	AAB18200.1	30	KENEENIQCCGENFMDE	Homo sapiens
882	832	Cannabinoid Receptor 1	AAB18200.1	31	EDGKVQVTRPDQARMDIR	Homo sapiens



883	832	Cannabinoid Receptor 1	AAB18200.1	32	CEGTAQPLDNSMGDS	Homo sapiens
884	832	Cannabinoid Receptor 1	AAB18200.1	274	MKSILDGLADITFR	Homo sapiens
885	832	Cannabinoid Receptor 1	AAB18200.1	297	NKLSSEKENEENIQ	Homo sapiens
886	833	Cannabinoid Receptor 2	CAA52376.1	33	KDGLDSNPMKDYMLSGPQK	Homo sapiens
887	833	Cannabinoid Receptor 2	CAA52376.1	34	QDRQVPGMARMRLDVRLAKT	Homo sapiens
888	833	Cannabinoid Receptor 2	CAA52376.1	35	KEEAPRSSVTETEDGK	Homo sapiens
889	833	Cannabinoid Receptor 2	CAA52376.1	36	RSGEIRSSAHHC LAHWKCC	Homo sapiens
890	922	Leukocyte Antigen CD97	NP_001775.1	2644	GRDPPAKDVMGPRQELLC	Homo sapiens
891	922	Leukocyte Antigen CD97	NP_001775.1	2646	CSPGYEPVSGAKTFKN	Homo sapiens
892	922	Leukocyte Antigen CD97	NP_001775.1	2647	FSFSEIITPTETC	Homo sapiens
893	922	Leukocyte Antigen CD97	NP_001775.1	2648	CRPGWKPRHGIPNNQK	Homo sapiens
894	922	Leukocyte Antigen CD97	NP_001775.1	2649	DGEAGRDPPAKDVMGPR	Homo sapiens
895	922	Leukocyte Antigen CD97	NP_001775.1	2650	ANASNLHSHKQAELE	Homo sapiens
896	922	Leukocyte Antigen CD97	NP_001775.1	2651	RLSAVNSIFLSHNNTKE	Homo sapiens
897	922	Leukocyte Antigen CD97	NP_001775.1	2652	KLTQKFSEINPDMKKL	Homo sapiens
898	922	Leukocyte Antigen CD97	NP_001775.1	2680	KLVDLMEAPGDVEAL	Homo sapiens
899	922	Leukocyte Antigen CD97	NP_001775.1	2681	RFFDKVQDLDGRDSTSS	Homo sapiens
900	941	EMR1 Hormone Receptor	Q14246	1180	RAEYLDIESKVINKEC	Homo sapiens
901	941	EMR1 Hormone Receptor	Q14246	2675	CVMHSEGHIRPTRKPNITK	Homo sapiens
902	941	EMR1 Hormone Receptor	Q14246	2677	CLNGQVREYKRWITGKTTP	Homo sapiens
903	941	EMR1 Hormone Receptor	Q14246	2678	CLNGQVREYKRWITGK	Homo sapiens
904	941	EMR1 Hormone Receptor	Q14246	2679	SGHLSCQGLKASCE	Homo sapiens
905	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1183	GTALANGTGELSEHQQ	Homo sapiens
906	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1184	ADSUEVFNLHERYYD	Homo sapiens
907	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1185	VRAHIRHRLRPRRQKA	Homo sapiens
908	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1186	DKLRLYIEQKTNLPALNRF	Homo sapiens
909	978	Cholecystokinin A Receptor	P32238	820	AKERKPSTSSGKYEDSDGC	Homo sapiens
910	978	Cholecystokinin A Receptor	P32238	821	CYLQKTRPPRKLELRQ	Homo sapiens
911	978	Cholecystokinin A Receptor	P32238	822	SANAWRAYDTASAERR	Homo sapiens
912	978	Cholecystokinin A Receptor	P32238	823	CPNPGPPGARGEVEE	Homo sapiens
913	1103	Corticotropin releasing factor Receptor 2	Q13324	453	CEPILDDKQKRYDLHYRIAL	Homo sapiens
914	1103	Corticotropin releasing factor Receptor 2	Q13324	502	QLVDHEVHESNEVWC	Homo sapiens

915	1103	factor Receptor 2	Q13324	505	DPEGPVSYCNTILDQIGTCW	Homo sapiens
916	1103	Corticotropin releasing factor Receptor 2	LR43	507	ALLEQYCHTITLITNLSG	Homo sapiens
917	1240	factor Receptor 2	CAA41734.1	41	SSHHEPRGSGISKEC	Homo sapiens
918	1240	Dopamine Receptor D1	CAA41734.1	42	KAKTPSPDGNATSLAETID	Homo sapiens
919	1240	Dopamine Receptor D1	CAA41734.1	43	CSQPESFKMSFKRE	Homo sapiens
920	1240	Dopamine Receptor D1	CAA41734.1	44	EDLKKEEAAGIARPLEK	Homo sapiens
921	1241	Dopamine Receptor D5	P21918	1407	PWEEDFWEPDVNAENC	Homo sapiens
922	1241	Dopamine Receptor D5	P21918	1408	CAPDTSLRASIKKETK	Homo sapiens
923	1241	Dopamine Receptor D5	P21918	1409	PNAVTPGNREVDNDEE	Homo sapiens
924	1241	Dopamine Receptor D5	P21918	1410	QTSPDGDVPVAESVWELDC	Homo sapiens
925	1242	Dopamine Receptor D2	P14416	1403	KRSSRAFRHLRAPLKGNC	Homo sapiens
926	1242	Dopamine Receptor D2	P14416	1404	CTVIMKSNNGSFPVNRVRV	Homo sapiens
927	1242	Dopamine Receptor D2	P14416	1405	KPEKNHGAKDHPKIAK	Homo sapiens
928	1242	Dopamine Receptor D2	P14416	1406	GKTRISLKTMSRRKLSQQKE	Homo sapiens
929	1243	Dopamine Receptor D3	P35462	1398	KQRRRKRLTRQNSQC	Homo sapiens
930	1243	Dopamine Receptor D3	P35462	1399	CNSVRPGFPQQTLSPDP	Homo sapiens
931	1243	Dopamine Receptor D3	P35462	1400	CQDTALGGPGFQERGGEE	Homo sapiens
932	1243	Dopamine Receptor D3	P35462	1401	KREEKTRNSLSPTIAP	Homo sapiens
933	1243	Dopamine Receptor D3	P35462	1402	STSLKLGPLQPRGVPLRE	Homo sapiens
934	1244	Dopamine Receptor D4	P21917	1394	VAVAVPLRYNRQGGSR	Homo sapiens
935	1244	Dopamine Receptor D4	P21917	1395	EVARRAKLHGRAPRRP	Homo sapiens
936	1244	Dopamine Receptor D4	P21917	1396	PPSPTPPAPRLPQDPC	Homo sapiens
937	1244	Dopamine Receptor D4	P21917	1397	PPQTPPQTRRRRAKITGRE	Homo sapiens
938	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	222	DAYPSAFPSAGANASGP	Homo sapiens
939	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	224	LVDIDRRDPLVVAALHLC	Homo sapiens
940	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	225	KRCFRQLCRKPCGRPD	Homo sapiens
941	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	226	SRPREATARERTAC	Homo sapiens
942	1424	Duffy Antigen	AAC50055.1	1411	TENSSQLDFEDVWNSS	Homo sapiens
943	1424	Duffy Antigen	AAC50055.1	1412	NDSFPDGDYDANLEAAAPC	Homo sapiens
944	1424	Duffy Antigen	AAC50055.1	1413	CHASLGHRLGAGQVPG	Homo sapiens

945	1424	Duffy Antigen	AAC50055.1	1415	FGAKGLKKALGMGPGP	Homo sapiens
946	1451	EBV-Induced Gene 2	AAA35924.1	45	KQEAERTCMEYPNFET	Homo sapiens
947	1451	EBV-Induced Gene 2	AAA35924.1	46	KLFRITAKQNPLTEKSGVNKK	Homo sapiens
948	1451	EBV-Induced Gene 2	AAA35924.1	47	KSAPEENSREMITETQM	Homo sapiens
949	1451	EBV-Induced Gene 2	AAA35924.1	48	CKGYKRKVMRMMLKRQ	Homo sapiens
950	1486	Endothelin B Receptor	BAA14398.1	54	GEERGFPDRAITPLLQTAE	Homo sapiens
951	1486	Endothelin B Receptor	BAA14398.1	55	RLAPAEVPGKDRTAGSP	Homo sapiens
952	1486	Endothelin B Receptor	BAA14398.1	56	PTISPPPCGGPIEIK	Homo sapiens
953	1486	Endothelin B Receptor	BAA14398.1	57	EKQSLKQSLKFKAND	Homo sapiens
954	1488	Endothelin A Receptor	AAB25530.1	49	RYSTNLSNHVDDFTFRGTE	Homo sapiens
955	1488	Endothelin A Receptor	AAB25530.1	50	NRRNGSLRLALSEHLK	Homo sapiens
956	1488	Endothelin A Receptor	AAB25530.1	51	EYRGEQHKTCMLNATSK	Homo sapiens
957	1488	Endothelin A Receptor	AAB25530.1	53	KNHDQNNHNIDRSSHKD	Homo sapiens
958	1598	Calcium-Sensing Receptor (CASR)	P41180	1425	RPGIEKFREAEERDIC	Homo sapiens
959	1598	Calcium-Sensing Receptor (CASR)	P41180	1426	CHLQEGAKGPLPVDTLR	Homo sapiens
960	1598	Calcium-Sensing Receptor (CASR)	P41180	1427	GHEESGDRFSNSSTAFRPLC	Homo sapiens
961	1598	Calcium-Sensing Receptor (CASR)	P41180	1428	KGIIEGPTCCFECVECPDG	Homo sapiens
962	1598	Calcium-Sensing Receptor (CASR)	P41180	1429	CSTAAHAFKVAAARATLRSN	Homo sapiens
963	1598	Calcium-Sensing Receptor (CASR)	P41180	1430	PQKNAMAHNRNTHQNSLE	Homo sapiens
964	1598	Calcium-Sensing Receptor (CASR)	P41180	1431	RPEVEDPEELSPALVSSSQ	Homo sapiens
965	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1878	ASWGGTPEERLKVAITMLIA	Homo sapiens
966	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1879	SEDSAPTNDTAANSAS	Homo sapiens
967	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1880	SYESAGYTVLRILPLVVL	Homo sapiens
968	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1881	PVFLFTVTIPNGD	Homo sapiens
969	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2612	EERLKVAITMLTARGIIRFV	Homo sapiens
970	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2613	ERALSEDSAPTNDTAANSAS	Homo sapiens

971	1681	Like Receptor	Follicle Stimulating Hormone Receptor	AA52477.1	58	QESKVTEIPSDLP RNAIELR	Homo sapiens
972	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	AAA52477.1	59	DVLEVIEADVFSNLPK	Homo sapiens
973	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	AA52477.1	60	RNGHCSSAPRVTSYST	Homo sapiens
974	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	AA52477.1	61	RGQRSSLAEDNESSYSRGFD	Homo sapiens
975	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2231	CHHRICHCSNRVFLCQE	Homo sapiens
976	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2232	LRVIQKGAFSGFGDLEK	Homo sapiens
977	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2233	LYVMSLLVLNVLAFFVIC	Homo sapiens
978	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2234	CNKSILRQEVDMYMTQARGQR	Homo sapiens
979	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2236	SDNNNLEELPNDVFHGA	Homo sapiens
980	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2238	KLVALMEASLTYPSC	Homo sapiens
981	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2241	SFESVLWLKNGIKQEIHN	Homo sapiens
982	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2248	IHSLQKVLLDIQDNIH	Homo sapiens
983	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2250	KANNLLYITPEAFQNL	Homo sapiens
984	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2251	CYEMQAQIYRTETSTVH	Homo sapiens
985	1726	G Protein-Coupled Receptor RDC1	G Protein-Coupled Receptor RDC1	AAA62370.1	1437	TNTPSSRKMMVRRVVC	Homo sapiens
986	1726	G Protein-Coupled Receptor RDC1	G Protein-Coupled Receptor RDC1	AAA62370.1	1439	ARASASSDQEKHSSRK	Homo sapiens
987	1726	G Protein-Coupled Receptor RDC1	G Protein-Coupled Receptor RDC1	AAA62370.1	1440	KYSAKTGLTKLIDASRVSET	Homo sapiens
988	1726	G Protein-Coupled Receptor RDC1	G Protein-Coupled Receptor RDC1	AAA62370.1	1893	PDTYVLKTVTSASNNETC	Homo sapiens
989	1762	Galanin Receptor GalR1	Galanin Receptor GalR1	AAA50767.1	192	GNSLVITVLARSKPGKPR	Homo sapiens
990	1762	Galanin Receptor GalR1	Galanin Receptor GalR1	AAA50767.1	193	PRASNQTFCWEQWDPRHKK	Homo sapiens

991	1762	Galanin Receptor GalR1	AAA50767.1	194	KKLKNMSKKSEASKKKTAQ	Homo sapiens
992	1762	Galanin Receptor GalR1	AAA50767.1	195	GNSLVITVLARSKP	Homo sapiens
993	1762	Galanin Receptor GalR1	AAA50767.1	196	RKDSHLSDTKENKSRID	Homo sapiens
994	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1250	QTAGELYQRWERYRREC	Homo sapiens
995	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1251	CENPEKNEAFDQRULER	Homo sapiens
996	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1253	CRLRSLGEEQRQLPERAFR	Homo sapiens
997	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1276	PTSRGLSSGTLPGPGNEA	Homo sapiens
998	1813	Gastrin-Releasing Peptide Receptor	P30550	829	CNISSHSADLPVNDWWSHPG	Homo sapiens
999	1813	Gastrin-Releasing Peptide Receptor	P30550	830	SDLHPFHEESTNQTFISC	Homo sapiens
1000	1813	Gastrin-Releasing Peptide Receptor	P30550	831	YNLPVEGNIHVKKQIES	Homo sapiens
1001	1813	Gastrin-Releasing Peptide Receptor	P30550	832	CQPGLIIRSHSTGRSTT	Homo sapiens
1002	1814	Cholecystokinin B Receptor	Q16144	1281	CEPPRIRGAGTRELEAIR	Homo sapiens
1003	1814	Cholecystokinin B Receptor	Q16144	1282	RVRNQGGPLGAVHQNGRC	Homo sapiens
1004	1814	Cholecystokinin B Receptor	Q16144	1283	LRFDGSDSDSQSRVR	Homo sapiens
1005	1814	Cholecystokinin B Receptor	Q16144	1284	CRPETGAVGKDSGCV	Homo sapiens
1006	1834	Glucagon Receptor	P47871	837	DGLRTRYSQKIGDDL	Homo sapiens
1007	1834	Glucagon Receptor	P47871	838	CGPDGQWVRGPRGQPPWRDAS	Homo sapiens
1008	1834	Glucagon Receptor	P47871	839	CQMDGEEIEVQKEVAKMYSS	Homo sapiens
1009	1834	Glucagon Receptor	P47871	840	TSNHRASSSPGHGPPSKE	Homo sapiens
1010	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	206	KLQKWTQKKEGKKLSRMK	Homo sapiens
1011	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	207	DRSLAIRPLALKNSKVGQ	Homo sapiens
1012	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	208	RMIHLADSSGQTKVFSQC	Homo sapiens
1013	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	209	DPHELQLNQSKNNIPRARLK	Homo sapiens
1014	1945	Opsin, green-sensitive	NP_000504.1	1746	QRLAGRHPQDSYEDSTQSS	Homo sapiens
1015	1945	Opsin, green-sensitive	NP_000504.1	1747	CKPFGNVRFDKLAIVG	Homo sapiens
1016	1945	Opsin, green-sensitive	NP_000504.1	1748	KTSCGPDVFSGSSYPGVQS	Homo sapiens

1017	1945	Opsin, green-sensitive	NP_000504.1	1750	CILQLFGKKVDDGSELSS	Homo sapiens
1018	1945	Opsin, green-sensitive	NP_000504.1	1767	STRGPFEGPNYHIAPR	Homo sapiens
1019	1945	Opsin, green-sensitive	NP_000504.1	1768	TNGLVLAATMKFKLLR	Homo sapiens
1020	1945	Opsin, green-sensitive	NP_000504.1	1769	ELSSASKTEVSSVSSVP	Homo sapiens
1021	1951	Growth Hormone	Q92847	581	ADLDWDASPGNDSLGD	Homo sapiens
1022	1951	Secretagogue Receptor	Q92847	582	GVEHENGTDPWDTNEC	Homo sapiens
1023	1951	Secretagogue Receptor	Q92847	583	KLWRRRRRGDAVVGASL	Homo sapiens
1024	1951	Secretagogue Receptor	Q92847	584	SQRKLSTLKDESSRAW	Homo sapiens
1025	1954	Secretagogue Receptor	Q02643	833	REDESACLQAAEEMPNTLG	Homo sapiens
1026	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	834	CPDFFSHFSSESGAVKRD	Homo sapiens
1027	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	835	VRKLEPAQGSLHTQSQ	Homo sapiens
1028	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	836	RTEISRKWHGHDPPELL	Homo sapiens
1029	2120	Histamine H1 Receptor	P35367	1167	GWNHFMQQTSVRREDKC	Homo sapiens
1030	2120	Histamine H1 Receptor	P35367	1168	CQHRELINRSLPSFSEIKLR	Homo sapiens
1031	2120	Histamine H1 Receptor	P35367	1169	AGGGSVLKSPSQTPKE	Homo sapiens
1032	2120	Histamine H1 Receptor	P35367	1170	KSPVVFSEQEDDREVDKLYC	Homo sapiens
1033	2120	Histamine H1 Receptor	P35367	1171	TAPGKGKLRSGSNTGLD	Homo sapiens
1034	2120	Histamine H1 Receptor	P35367	1172	KRLRSHSRQVVGSLHNMIRE	Homo sapiens
1035	2121	Histamine H2 Receptor	P25021	1173	NSRNETSKGNHTSKC	Homo sapiens
1036	2121	Histamine H2 Receptor	P25021	1174	CITYRIFKVARDAQAKR	Homo sapiens
1037	2121	Histamine H2 Receptor	P25021	1175	RDQAKRINHSSWKAA	Homo sapiens
1038	2121	Histamine H2 Receptor	P25021	1176	TAFVYRGLRGDDAINE	Homo sapiens
1039	2121	Histamine H2 Receptor	P25021	1177	HKTSLRNASQLSRTQSRE	Homo sapiens
1040	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	227	DSNGSAGSEDAQLEPA	Homo sapiens
1041	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	228	KVREDVDVIECSLQFPDDDD	Homo sapiens
1042	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	229	RNTVQDDPAYLRDIDGMNK	Homo sapiens
1043	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	230	CFPLKMRMERQSTSRVRN	Homo sapiens

1044	2964	(OPRK1) Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1432	CNTGIRKFPDVTKVFSSEN	Homo sapiens
1045	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1433	KMHNGAFRGATGPKILD	Homo sapiens
1046	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1434	CESTVRKVSNIKLYSS	Homo sapiens
1047	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1435	FAVRNPELMATNKDTK	Homo sapiens
1048	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1436	CKRRAELYRRKDFSAYTSN	Homo sapiens
1049	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	210	ERHITVFRMQLHTRMSNRR	Homo sapiens
1050	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	211	RQRTMRMSRHSSGPRRNRD	Homo sapiens
1051	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	212	KHLATEWNTVSKLVM	Homo sapiens
1052	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	213	ENPTGPTSSDRSASSLN	Homo sapiens
1053	3038	G Protein-Coupled Receptor MRG	AAB21255.1	184	ESQISLSCSLCHSGDQEAQ	Homo sapiens
1054	3038	G Protein-Coupled Receptor MRG	AAB21255.1	185	QQQKATRVYAVVQISAPM	Homo sapiens
1055	3038	G Protein-Coupled Receptor MRG	AAB21255.1	186	DKPEVGRNKKAAAGIDPME	Homo sapiens
1056	3038	G Protein-Coupled Receptor MRG	AAB21255.1	187	EQPHSTQHVENLLPREHRVD	Homo sapiens
1057	3057	Melanocortin 3 Receptor (MC3R)	P41968	451	RLHVKRIAALPPADGVAPQ	Homo sapiens
1058	3057	Melanocortin 3 Receptor (MC3R)	P41968	452	DPLIYAFRSLELRNTFRE	Homo sapiens
1059	3057	Melanocortin 3 Receptor (MC3R)	P41968	562	QAPFFSNQSSSAFCEQVFI	Homo sapiens
1060	3057	Melanocortin 3 Receptor (MC3R)	P41968	563	IVHSDYLTFFDQFIQHMDNI	Homo sapiens

1061	3058	(MC3R) Melanocortin 4 Receptor	AAB33341.1	1032	HSNASESLGKGYSDGGC	Homo sapiens
1062	3058	(MC4R) Melanocortin 4 Receptor	AAB33341.1	1033	KRIAVLPGTGAIKQGA	Homo sapiens
1063	3058	(MC4R) Melanocortin 4 Receptor	AAB33341.1	1035	NSTDIDAQSFTVNIDN	Homo sapiens
1064	3058	(MC4R) Melanocortin 4 Receptor	AAB33341.1	1469	NSTHRGMHTSLHLWNRSSYR	Homo sapiens
1065	3059	(MC4R) Melanocortin 5 Receptor	P33032	1022	ATEGNLSGPNVKNKSSPC	Homo sapiens
1066	3059	(MC5R) Melanocortin 5 Receptor	P33032	1024	NKHLVIADAFVRHIDN	Homo sapiens
1067	3059	(MC5R) Melanocortin 5 Receptor	P33032	1025	MNSSFHLHFLDLNLNAT	Homo sapiens
1068	3059	(MC5R) Melanocortin 5 Receptor	P33032	1026	RYHHIMTARRSGAIAG	Homo sapiens
1069	3061	(MC5R) Melanocortin 1 Receptor	AAD41352.1	1036	QGSQRRLGSLNSTPT	Homo sapiens
1070	3061	(MC1R) Melanocortin 1 Receptor	AAD41352.1	1038	EAGALVARAAVLQQLD	Homo sapiens
1071	3061	(MC1R) Melanocortin 1 Receptor	AAD41352.1	1039	ALRYHSIVTLPRARQA	Homo sapiens
1072	3061	(MC1R) Melanocortin 1 Receptor	AAD41352.1	1040	CQHAQGGIARLHKRQRP	Homo sapiens
1073	3079	Melatonin Receptor type 1a	AAB17720.1	214	HSLKYDKLYSSKNSLC	Homo sapiens
1074	3079	Melatonin Receptor type 1a	AAB17720.1	215	CTARVFFVDSSNDVADR	Homo sapiens
1075	3079	Melatonin Receptor type 1a	AAB17720.1	216	QVRQRVKPDRPKLKP	Homo sapiens
1076	3079	Melatonin Receptor type 1a	AAB17720.1	217	DSSNDVADRVKWKPSPLMTN	Homo sapiens
1077	3080	Melatonin Receptor type 1b	P49286	930	AVRPGWSGAGSARPSR	Homo sapiens
1078	3080	Melatonin Receptor type 1b	P49286	931	LVAIFYDGWALGEEHC	Homo sapiens
1079	3080	Melatonin Receptor type 1b	P49286	932	LVLQARRKAKPESRLC	Homo sapiens
1080	3080	Melatonin Receptor type 1b	P49286	933	CIQDASKGSHAEGLQSPA	Homo sapiens
1081	3080	Melatonin Receptor type 1b	P49286	934	GEMAPQIPEGLFVTSY	Homo sapiens
1082	3081	Melatonin-Related Receptor	Q13585	751	LAARDPAGQNPNDNQLAE	Homo sapiens
1083	3081	Melatonin-Related Receptor	Q13585	752	ARARAHARDQAREQDRAHAC	Homo sapiens
1084	3081	Melatonin-Related Receptor	Q13585	753	DRASGHPKPHSRSSAY	Homo sapiens
1085	3081	Melatonin-Related Receptor	Q13585	754	HPKPAADNPELSASHC	Homo sapiens



1086	3081	Melatonin-Related Receptor	Q13585	755	DDSDLPESSAPAAAGPT	Homo sapiens
1087	3093	Metabotropic Glutamate Receptor 1	Q13255	879	DDYKIQMINKSGVVRVC	Homo sapiens
1088	3093	Metabotropic Glutamate Receptor 1	Q13255	880	CRSNTFLNIFRRKKAG	Homo sapiens
1089	3093	Metabotropic Glutamate Receptor 1	Q13255	881	DTSTKITLYNVEEEEDA	Homo sapiens
1090	3093	Metabotropic Glutamate Receptor 1	Q13255	882	ERFKLLQEVVVEHERE	Homo sapiens
1091	3094	Metabotropic Glutamate Receptor 2	Q14416	891	DFVRASLSRGADGSRHIC	Homo sapiens
1092	3094	Metabotropic Glutamate Receptor 2	Q14416	892	CVATSEKVGRAMSRAAFEG	Homo sapiens
1093	3094	Metabotropic Glutamate Receptor 2	Q14416	893	CAAHSLRAVPFEQESK	Homo sapiens
1094	3094	Metabotropic Glutamate Receptor 2	Q14416	894	CDAMRPVNGRRLYKDF	Homo sapiens
1095	3094	Metabotropic Glutamate Receptor 2	Q14416	895	DAPFRPADTHNEVRFRDR	Homo sapiens
1096	3094	Metabotropic Glutamate Receptor 2	Q14416	896	GKETAPERREVVTLCR	Homo sapiens
1097	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	897	GGLFPINEKGTGTEEC	Homo sapiens
1098	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	898	EFVRASLTKVDEAEVMC	Homo sapiens
1099	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	899	RSNIRKSYDSVIRELL	Homo sapiens
1100	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	900	CDKHLAIDSSNYEQES	Homo sapiens
1101	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	902	GTRRYTLAEKRETVILKC	Homo sapiens
1102	3096	Metabotropic Glutamate Receptor 4	Q14833	909	PSSLGKPKGHPHMNSIRID	Homo sapiens
1103	3096	Metabotropic Glutamate Receptor 4	Q14833	910	CGSGGPPITKPERVVG	Homo sapiens
1104	3096	Metabotropic Glutamate Receptor 4	Q14833	911	CKLSRHALKKGSHVKK	Homo sapiens
1105	3096	Metabotropic Glutamate Receptor 4	Q14833	913	CPRMDPVDGTQLLKYI	Homo sapiens

1106	3096	Metabotropic Glutamate Receptor 4	Q14833	914	RIERMHWPGSGGQLPRSC	Homo sapiens
1107	3097	Metabotropic Glutamate Receptor 5	P41594	883	KDYFDYINVGWDNGEL	Homo sapiens
1108	3097	Metabotropic Glutamate Receptor 5	P41594	884	KMDDDEVWSSKSNIRSV	Homo sapiens
1109	3097	Metabotropic Glutamate Receptor 5	P41594	885	GETLRYKDRRLAQHKSEIC	Homo sapiens
1110	3097	Metabotropic Glutamate Receptor 5	P41594	886	NPNQTAIVIKPFPKSTE	Homo sapiens
1111	3097	Metabotropic Glutamate Receptor 5	P41594	887	KALYDVAAEEHFPAPA	Homo sapiens
1112	3097	Metabotropic Glutamate Receptor 5	P41594	888	RSPSISTLSHRAGSASRTD	Homo sapiens
1113	3097	Metabotropic Glutamate Receptor 5	P41594	889	RESPAAGPEAAAAPD	Homo sapiens
1114	3098	Metabotropic Glutamate Receptor 6	O15303	903	QALIRGRGDGDEVGVRC	Homo sapiens
1115	3098	Metabotropic Glutamate Receptor 6	O15303	904	KLTSSTQSDDDSTRKC	Homo sapiens
1116	3098	Metabotropic Glutamate Receptor 6	O15303	905	DVEALQWSGDPHEVPSSLC	Homo sapiens
1117	3098	Metabotropic Glutamate Receptor 6	O15303	906	RFQVDEFTCEACPGDM	Homo sapiens
1118	3098	Metabotropic Glutamate Receptor 6	O15303	907	GARPPHSVIDYEEQRT	Homo sapiens
1119	3099	Metabotropic Glutamate Receptor 7	Q14831	917	CIAGSVRIPQERKDRITDFD	Homo sapiens
1120	3099	Metabotropic Glutamate Receptor 7	Q14831	918	NDEDIKQILAAAKRAD	Homo sapiens
1121	3099	Metabotropic Glutamate Receptor 7	Q14831	921	NIEDMQWKGKGVREIPASVC	Homo sapiens
1122	3099	Metabotropic Glutamate Receptor 7	Q14831	2693	IKQLDTPNSRAVVI	Homo sapiens
1123	3099	Metabotropic Glutamate Receptor 7	Q14831	2694	DPPNIIDYDEHKTM	Homo sapiens
1124	3100	Metabotropic Glutamate Receptor 8	O00222	922	CANGDPPIFTKPKIS	Homo sapiens
1125	3100	Metabotropic Glutamate	O00222	923	CPRMSTIDGKELLYIRA	Homo sapiens

1126	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	924	KVEDMQWAHRETHPASVC	Homo sapiens
1127	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	925	CESLETNTSSIKTITYIS	Homo sapiens
1128	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	1894	KFYWILTMQRTHSQEYAH	Homo sapiens
1129	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	231	DGNLSDPCGPNRTNLGGRDS	Homo sapiens
1130	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	232	DRTNHQLENLEAETAPLP	Homo sapiens
1131	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	233	IKALVTIPETTFQTVS	Homo sapiens
1132	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	234	RIRQNTDRDHPSTANTVDR	Homo sapiens
1133	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1325	SERSQPGAEGSPETPPGRC	Homo sapiens
1134	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1326	CRAPRLQLQAYSWKEEE	Homo sapiens
1135	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1327	SSEGEPEPGSEVVIKMP	Homo sapiens
1136	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1328	KQPPRSSPNTVKRPTKKGRD	Homo sapiens
1137	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1329	CRWDKRRWRKIPKRPGRS	Homo sapiens
1138	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1330	EHNKIQNGKAPRDPVTENC	Homo sapiens
1139	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1331	DSTSVSAVASNMIRDDE	Homo sapiens
1140	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1332	ENTVSTSLGHSKDENSKQTC	Homo sapiens
1141	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1333	DEKQNIIVARKIVKMTK	Homo sapiens
1142	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1831	RIKKDKKEPVANQDPVPSL	Homo sapiens
1143	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	218	SRSRVHHRPEGPKEKKAKT	Homo sapiens
1144	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	219	KKPRPGGRPGGLRNGKLEEA	Homo sapiens
1145	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	220	DKDTSNESSSSGSAQTNTKER	Homo sapiens
1146	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	221	RPAANVARKFASIRNQVRK	Homo sapiens

1147	3227	Muscarinic Acetylcholine Receptor M5	P08912	1334	KAEKRKPAHRAFRSC	Homo sapiens
1148	3227	Muscarinic Acetylcholine Receptor M5	P08912	1335	CSSYPSEDEDKPAID	Homo sapiens
1149	3227	Muscarinic Acetylcholine Receptor M5	P08912	1336	KESPGEEFSAEETETFV	Homo sapiens
1150	3227	Muscarinic Acetylcholine Receptor M5	P08912	1337	KFRLVVKADGNQETNNGC	Homo sapiens
1151	3227	Muscarinic Acetylcholine Receptor M5	P08912	1338	KEPSTKGLNPNPSHQM	Homo sapiens
1152	3378	Tachykinin Receptor 3	NP_001050.1	1757	PAAETWIDGGGGVGAD	Homo sapiens
1153	3378	Tachykinin Receptor 3	NP_001050.1	1759	PSQPWANLTIQFVQPSWR	Homo sapiens
1154	3378	Tachykinin Receptor 3	NP_001050.1	1760	SRKKRATPRDPSFNGC	Homo sapiens
1155	3378	Tachykinin Receptor 3	NP_001050.1	2265	ADAVNLTAALAAGAA	Homo sapiens
1156	3378	Tachykinin Receptor 3	NP_001050.1	2290	SPSALGLPVASAPSQP	Homo sapiens
1157	3380	Neuromedin B Receptor	P28336	824	ERDFLPASDGTTELVR	Homo sapiens
1158	3380	Neuromedin B Receptor	P28336	825	KTUKSAHNLPGEYNE	Homo sapiens
1159	3380	Neuromedin B Receptor	P28336	826	SEVARISSLDNSSFAC	Homo sapiens
1160	3380	Neuromedin B Receptor	P28336	828	CGRKSYQERGTSYLLSSA	Homo sapiens
1161	3404	Neuropeptide Y Receptor Type 2	P49146	1057	RGELVPDPEPIDST	Homo sapiens
1162	3404	Neuropeptide Y Receptor Type 2	P49146	1058	CIVYHLESKISKRISF	Homo sapiens
1163	3404	Neuropeptide Y Receptor Type 2	P49146	1059	REYSLEIIPDFEIVAC	Homo sapiens
1164	3404	Neuropeptide Y Receptor Type 2	P49146	1060	NDHYHQRRQKTKMLVC	Homo sapiens
1165	3404	Neuropeptide Y Receptor Type 2	P49146	1061	CEQRDLAIHSEVSVTFKAKK	Homo sapiens
1166	3404	Neuropeptide Y Receptor Type 2	P49146	2297	MGPIGAEADENQTVEMKVE	Homo sapiens
1167	3404	Neuropeptide Y Receptor Type 2	P49146	2298	SEVSVTFKAKKNLEVRKNSG	Homo sapiens
1168	3405	Neuropeptide Y Receptor Type 4	P50391	1068	CVTVRQKEKANVTNLL	Homo sapiens
1169	3405	Neuropeptide Y Receptor Type 4	P50391	1069	KNHSALEFLADKVVC	Homo sapiens
1170	3405	Neuropeptide Y Receptor Type 4	P50391	1070	CYARIYRRRLQRQGRVFHKG	Homo sapiens

1171	3405	Type 4 Neuropeptide Y Receptor	P50391	1071	CQQSAPLESEHLPLST	Homo sapiens
1172	3405	Type 4 Neuropeptide Y Receptor	P50391	2275	SEHCQDSVDVMVFVTS	Homo sapiens
1173	3406	Type 4 Neuropeptide Y Receptor	Q15761	1072	MIKRNQKTTVNFLGN	Homo sapiens
1174	3406	Type 5 Neuropeptide Y Receptor	Q15761	1073	CGLSNKENRLEENEMI	Homo sapiens
1175	3406	Type 5 Neuropeptide Y Receptor	Q15761	1074	NLTLPSSKSGPQVKL	Homo sapiens
1176	3406	Type 5 Neuropeptide Y Receptor	Q15761	1075	SFIKHRRRYSKKTAC	Homo sapiens
1177	3406	Type 5 Neuropeptide Y Receptor	Q15761	1076	PERPSQENHSRILPEN	Homo sapiens
1178	3406	Type 5 Neuropeptide Y Receptor	Q15761	1077	CFEIKPEENSVDVHELRV	Homo sapiens
1179	3408	Type 5 Neurotensin Receptor Type 1	P30989	935	RVLAAPSSSELDVNTDIYS	Homo sapiens
1180	3408	Type 5 Neurotensin Receptor Type 1	P30989	936	CHPFKAKTLMRSRTKK	Homo sapiens
1181	3408	Type 5 Neurotensin Receptor Type 1	P30989	937	GEQNRSDGGQHAGGLVC	Homo sapiens
1182	3408	Type 5 Neurotensin Receptor Type 1	P30989	938	RQAAEQGGQVCTVGGEHS	Homo sapiens
1183	3408	Type 5 Neurotensin Receptor Type 1	P30989	939	CPVWRRRRRRKRPAFSRKADS	Homo sapiens
1184	3452	Type 5 Opiate Receptor-Like 1 (OPRL1)	P41146	940	CHPIRALDVRTSSKAGQA	Homo sapiens
1185	3452	Type 5 Opiate Receptor-Like 1 (OPRL1)	P41146	941	PVAIMGSAQVEDEEIEC	Homo sapiens
1186	3452	Type 5 Opiate Receptor-Like 1 (OPRL1)	P41146	942	GVQPSSETAVAILRFC	Homo sapiens
1187	3452	Type 5 Opiate Receptor-Like 1 (OPRL1)	P41146	943	CASALRRDVGVS DRVRSIAK	Homo sapiens
1188	3513	Type 5 Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2123	TPEPRPRTQPMASPRLGTFC	Homo sapiens
1189	3513	Type 5 Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2124	TAVASLLKGRQGIYTE	Homo sapiens

1190	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2125	EMQTDINGGSLKPVRTAAK	Homo sapiens
1191	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2126	CSLGFQSPRKEIQWES	Homo sapiens
1192	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2127	SEGSDASTIEHTASESC	Homo sapiens
1193	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2128	NPASGKVSQVGGQTSD	Homo sapiens
1194	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1486	CKKLHIPLKAGNDLDIRIK	Homo sapiens
1195	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1500	KIVKPLWTSFIQSVSYSKLL	Homo sapiens
1196	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1502	TAITKKIFKSHLKSSRNSTS	Homo sapiens
1197	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1503	VKKKSSRNIFSIVFVFFVC	Homo sapiens
1198	3582	Oxytocin Receptor	CAA46097.1	244	AEGNRTAGPPRRNEALARVE	Homo sapiens
1199	3582	Oxytocin Receptor	CAA46097.1	245	RLAVLATWLGCLVASAP	Homo sapiens
1200	3582	Oxytocin Receptor	CAA46097.1	246	PEGAAAGDGGRRVALAR	Homo sapiens
1201	3582	Oxytocin Receptor	CAA46097.1	247	YLGRRLGSETSASKSNSS	Homo sapiens
1202	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	854	MQRIGDVLGSSSEDFRR	Homo sapiens
1203	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	855	ARGGRVTCCHDTSAPEL	Homo sapiens
1204	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	856	KPAYGTSGLPRAKRK	Homo sapiens
1205	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	857	TGPSPATPARRRLGLRRSD	Homo sapiens
1206	3595	Purinergic Receptor P2Y1	CAA07339.1	386	RYSGWVYPLKSLGRLKKKN	Homo sapiens
1207	3595	Purinergic Receptor P2Y1	CAA07339.1	387	SGTGVKRNKNTTCYD	Homo sapiens
1208	3595	Purinergic Receptor P2Y1	CAA07339.1	388	RALIYKDLDNSPLRRKS	Homo sapiens
1209	3595	Purinergic Receptor P2Y1	CAA07339.1	389	DTFRRRLSRATRKASRRSE	Homo sapiens
1210	3596	Purinergic Receptor P2Y5	P43657	850	FVQSTHSQGNNAEAC	Homo sapiens
1211	3596	Purinergic Receptor P2Y5	P43657	851	MVLKLTLPVTLRSKI	Homo sapiens
1212	3596	Purinergic Receptor P2Y5	P43657	852	TIQNSIKMIKNWSVRIRD	Homo sapiens
1213	3596	Purinergic Receptor P2Y5	P43657	853	SEVHGAENFIQHNLQTLK	Homo sapiens
1214	3597	Purinergic Receptor P2Y6	Q15077	874	CTSRRLTRTAVYTLN	Homo sapiens
1215	3597	Purinergic Receptor P2Y6	Q15077	875	AQERRGKAARMMAVVV	Homo sapiens

1216	3597	Purinergic Receptor P2Y6	Q15077	876	TKTAYLAVRSTPGVPC	Homo sapiens
1217	3597	Purinergic Receptor P2Y6	Q15077	877	KKRRRRPHELLQKLIK	Homo sapiens
1218	3597	Purinergic Receptor P2Y6	Q15077	2726	CHPLAPWHKRGGRRAAW	Homo sapiens
1219	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	870	CFRMKMRSETAIFITN	Homo sapiens
1220	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	871	RTLKRPATLSQIGTNKK	Homo sapiens
1221	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	872	ESFQKSFYINAHIRMES	Homo sapiens
1222	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	873	KTETPLTKPSLPAIQEE	Homo sapiens
1223	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	1895	SSLRPRLGNATANNTCIVD	Homo sapiens
1224	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	248	KAKVQCELNITAIQLQEGE	Homo sapiens
1225	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	249	ESLIMQDDPQNSIEATSVDK	Homo sapiens
1226	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	250	NSEQDCLPHSFHEETKE	Homo sapiens
1227	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	251	EETKEDSGRQGGDDILMEKPS	Homo sapiens
1228	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	761	CEKRLKEVLQRPASIMESDK	Homo sapiens
1229	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	762	ESEEDKEAPTGSRYVRGPC	Homo sapiens
1230	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	763	LYSGATLDEAERLTFEELR	Homo sapiens
1231	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	765	KDDGFLNGSCSGLDEEASG	Homo sapiens
1232	3732	PACAP Receptor Type 1	P41586	944	CLEKIQRANELMGFNDSS	Homo sapiens
1233	3732	PACAP Receptor Type 1	P41586	945	CPFLFRIFNPDQVWETET	Homo sapiens
1234	3732	PACAP Receptor Type 1	P41586	946	DSNSLDLSDMGVVSRLNC	Homo sapiens
1235	3732	PACAP Receptor Type 1	P41586	948	IKRKWRSWKVNRVFAVD	Homo sapiens
1236	3732	PACAP Receptor Type 1	P41586	2292	ESDFGDSNSLDLSDMGVVSRL	Homo sapiens
1237	3844	Apelin Receptor	AAA18954.1	62	RTTGDLNITKVQC	Homo sapiens
1238	3844	Apelin Receptor	AAA18954.1	63	RSSREKRRSADIFIAS	Homo sapiens
1239	3844	Apelin Receptor	AAA18954.1	64	QTIAGHFRKERIEGLRKRRR	Homo sapiens
1240	3844	Apelin Receptor	AAA18954.1	65	GPNMKGKGGEQMIHEKSPYSQ	Homo sapiens

1241	3845	Chemokine-Like Receptor 1 (CMKLR1)	LR39	447	RMEDEDYNTSISYGDEYPD	Homo sapiens
1242	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	448	DSIVVLEDLSPLEARVTR	Homo sapiens
1243	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	449	LTIVCKLHRNRLAKTKKPFK	Homo sapiens
1244	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	450	RSFTKMSSMINERTSMNERE	Homo sapiens
1245	3846	Spingolipid Receptor Edg1	AAA52336.1	1010	TRSRRLTRKNISKASRSSE	Homo sapiens
1246	3846	Spingolipid Receptor Edg1	AAA52336.1	1011	CPSGDSAGKFKRPIIAG	Homo sapiens
1247	3846	Spingolipid Receptor Edg1	AAA52336.1	1012	CPSGDSAGKFKRPIIAGME	Homo sapiens
1248	3846	Spingolipid Receptor Edg1	AAA52336.1	1013	RSKSDNSSHPQKDEGD	Homo sapiens
1249	3847	Spingolipid Receptor Edg3	Q99500	1028	ERHLMIKMRPYDANK	Homo sapiens
1250	3847	Spingolipid Receptor Edg3	Q99500	1029	LVKSSSRKVANHNNSE	Homo sapiens
1251	3847	Spingolipid Receptor Edg3	Q99500	1030	SPKVKEDELPHIDPSSC	Homo sapiens
1252	3847	Spingolipid Receptor Edg3	Q99500	1031	CLVRGARGARASPIQPALD	Homo sapiens
1253	3847	Spingolipid Receptor Edg3	Q99500	1752	REHYQVVGKLAGRLKEASE	Homo sapiens
1254	3848	C-C Chemokine Receptor 9	P51686	958	RAHTWREKRLLYSKMVC	Homo sapiens
1255	3848	C-C Chemokine Receptor 9	P51686	959	KEESGIAICTMVYPSDEST	Homo sapiens
1256	3848	C-C Chemokine Receptor 9	P51686	960	QAKKSSKHKALKVTIT	Homo sapiens
1257	3848	C-C Chemokine Receptor 9	P51686	961	GERFRDLVTKLNLC	Homo sapiens
1258	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	74	ENYSYDLDYSLSDLEEK	Homo sapiens
1259	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	75	RDTVEFNHNTLCYNNFQKHID	Homo sapiens
1260	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	76	SKKFQARFRSSVAEILK	Homo sapiens
1261	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	77	GTVSEQLRNSETKNLC	Homo sapiens
1262	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1087	HPLRRRISRLSAYAV	Homo sapiens
1263	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1088	CEEFWGSQERQRQLYA	Homo sapiens
1264	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1089	SVYRVSVKLRNRVWPGC	Homo sapiens
1265	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1090	CVTGSQADWDRARRRR	Homo sapiens
1266	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1091	DSFREELRKLLVAWPRKIA	Homo sapiens



1267	3851	Receptor 10 (GPR10) G Protein-Coupled Receptor GPR12	AAA91630.1	78	GCI PSSLAQRARSPSD	Homo sapiens
1268	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	79	ENISAAVSSRVP AVEPEPE	Homo sapiens
1269	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	307	STCSVVRPLTKNNAA	Homo sapiens
1270	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	308	QSEATKLVTIGLIVAS	Homo sapiens
1271	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	84	KQKENECLGDYPEVLQE	Homo sapiens
1272	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	85	SMNNRTVQHGVTSLS	Homo sapiens
1273	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	86	ETLKLYDFFPSCDMRKDLR	Homo sapiens
1274	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	87	GRSVHVDFSSSESQSRHGS	Homo sapiens
1275	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1511	CLKNYDFGSSTETSDSHLTK	Homo sapiens
1276	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1512	KALSTFIHAEDFARRRKRS	Homo sapiens
1277	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1612	ATSPNSDIRETHSHVP	Homo sapiens
1278	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1613	LMGALHFPGSRRLLD	Homo sapiens
1279	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1615	GLPTLLSRELTUDDKPVC	Homo sapiens
1280	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	93	DRYMAIVGPKYAKELKNTC	Homo sapiens
1281	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	94	KDPDKDSTPATCLKISD	Homo sapiens
1282	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	95	GRTSKLKPVK/KEKSIR	Homo sapiens
1283	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	96	RNYLRSRLRRKSFRRGSLR	Homo sapiens
1284	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	97	KVSREKAKKMI AASWIFD	Homo sapiens
1285	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	98	DGRTVRRRTMNIVPRTKVK	Homo sapiens

1286	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	99	RRGMKETFCMSSMKC	Homo sapiens
1287	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	100	KTITKDSIYDSFDREAKEKK	Homo sapiens
1288	3856	G Protein-Coupled Receptor GPR2/CCRI10	P46092	1152	ALLFSQDGGQREGQRRRC	Homo sapiens
1289	3856	G Protein-Coupled Receptor GPR2/CCRI10	P46092	1153	SGDEEDAYSAEPLPELC	Homo sapiens
1290	3856	G Protein-Coupled Receptor GPR2/CCRI10	P46092	1154	ALLDADLLAARERSC	Homo sapiens
1291	3856	G Protein-Coupled Receptor GPR2/CCRI10	P46092	1155	RRLLRGGSSPSGPQRRGC	Homo sapiens
1292	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	101	KSGRHHLSAGPHALTQ	Homo sapiens
1293	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	102	RTNASGLEVPLHLFARLDE	Homo sapiens
1294	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	103	SRPGLLHQGRQRRVRAMQ	Homo sapiens
1295	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	104	GQHGEREPSSGDVSMHRSS	Homo sapiens
1296	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	105	SERQARFSSQSGETGEVQAC	Homo sapiens
1297	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	106	DPYTVRSKGPLNGC	Homo sapiens
1298	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	107	NSTLDGNGSSHFPCLL	Homo sapiens
1299	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	108	CASQTANDPYTVRSK	Homo sapiens
1300	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	109	EINMQSESINITVRDDIDD	Homo sapiens
1301	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	111	RRAVKRHRERRERQKRVFRM	Homo sapiens
1302	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	112	TRQKFQKVLKSKMKKR	Homo sapiens
1303	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	113	DPKRNKKITFEDSEIREKR	Homo sapiens
1304	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1532	CAPGQGGRRWRPLQPAWVEG	Homo sapiens
1305	3860	G Protein-Coupled	AAH01736.1	1533	EASLLTGPNASNTSDGPDN	Homo sapiens

1306	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1539	KGVGRAVGLGGSGCQATE	Homo sapiens
1307	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1565	RMITSSVAPASQRSIRLTKR	Homo sapiens
1308	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1567	RAVSNAQTADEERTESKG	Homo sapiens
1309	3861	Receptor SLC/MCH1 G Protein-Coupled	O00155	376	RGLQLPUGGQDSQCCEEP	Homo sapiens
1310	3861	Receptor GPR25 G Protein-Coupled	O00155	377	CRISRRLLRRPPHVGRARRNS	Homo sapiens
1311	3861	Receptor GPR25 G Protein-Coupled	O00155	378	RTGRLARRISSASSLSRDD	Homo sapiens
1312	3861	Receptor GPR25 G Protein-Coupled	O00155	483	DYSGLDGLEELELC PAGD	Homo sapiens
1313	3862	Receptor GPR25 G Protein-Coupled	AAB60402.1	118	TVYCLLGDAHSPLYT	Homo sapiens
1314	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	119	EGPTGPAAPLPSKAWD	Homo sapiens
1315	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	120	HFAAVFCIGSAEMSL	Homo sapiens
1316	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	121	GLTCGVVYPLSKNH	Homo sapiens
1317	3863	Receptor GPR3 G Protein-Coupled	O00270	1157	REPEKQPKLQRAQALVTLV	Homo sapiens
1318	3863	Receptor GPR31 G Protein-Coupled	O00270	1158	CHSFYSRADGSGFSIIWGEA	Homo sapiens
1319	3863	Receptor GPR31 G Protein-Coupled	O00270	1159	QNLGSCRALCAVAHTSDVTG	Homo sapiens
1320	3863	Receptor GPR31 G Protein-Coupled	O00270	1160	SPTRSSYRRVFHTLRGKGQ	Homo sapiens
1321	3864	Receptor GPR31 G Protein-Coupled	AAA98457.1	143	DELFRDRYNHTCFEKFPM E	Homo sapiens
1322	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	144	LRAVRGVSSTERQEKAKIKR	Homo sapiens
1323	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	145	RSDVAKALHNLRLFLASDK	Homo sapiens
1324	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	146	NASLTLETPLTSKRNSTAK	Homo sapiens

1325	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	166	FQYLPSETVSLTVG	Homo sapiens
1326	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	167	CLAERAAACSVVRPLARSH	Homo sapiens
1327	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	168	HLVVRICQVWVRHAH	Homo sapiens
1328	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	169	EIQRALWLLCGCFQSK	Homo sapiens
1329	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	171	ATAESRRVAGRTYSAAR	Homo sapiens
1330	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	172	RLDDEQGRRQCVLVFPQPE	Homo sapiens
1331	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	173	RLHAMRLDSHAKALERAKKR	Homo sapiens
1332	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	174	DASFRNLRLQITC	Homo sapiens
1333	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	175	NVSEQDNGTGHNAIFSEP	Homo sapiens
1334	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	176	RSRHMPWRTYRGAKVAS	Homo sapiens
1335	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	177	VLRSGAKALGKARRK	Homo sapiens
1336	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	178	LDDNFRKNFRSILRC	Homo sapiens
1337	3869	G Protein-Coupled Receptor HM74	BAA01721.1	179	QDHFLEIDKKNCVFRDD	Homo sapiens
1338	3869	G Protein-Coupled Receptor HM74	BAA01721.1	180	ARIWLSLRQRQMDRHAQIKR	Homo sapiens
1339	3869	G Protein-Coupled Receptor HM74	BAA01721.1	181	CLQRKMTGEPDNNRSTSV	Homo sapiens
1340	3869	G Protein-Coupled Receptor HM74	BAA01721.1	182	DPNKTRGAPEALMANSGE	Homo sapiens
1341	3869	G Protein-Coupled Receptor HM74	BAA01721.1	183	SNNHKKGHCHQEPASLEKQ	Homo sapiens
1342	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1453	RQRQMDRHAQIKRAITFMV	Homo sapiens
1343	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1454	SPSYLGPTSNNHSSKKG	Homo sapiens
1344	3870	G Protein-Coupled Receptor HM74	Q15743	1192	AVRRSHGTQKSRKDKI	Homo sapiens

1345	3870	Receptor OGR1 G Protein-Coupled Receptor OGR1	Q15743	1193	LMHEEVIEDENQHRVC	Homo sapiens
1346	3870	G Protein-Coupled Receptor OGR1	Q15743	1194	CFVSETHRDLARLG	Homo sapiens
1347	3870	G Protein-Coupled Receptor OGR1	Q15743	1195	CSRTGRAREAYPLGAPEASG	Homo sapiens
1348	3921	Prostacyclin Receptor	P43119	1188	CRMYRQGQRHGGSLGPRPT	Homo sapiens
1349	3921	Prostacyclin Receptor	P43119	1189	CFTQAVAPDSSEMGD	Homo sapiens
1350	3921	Prostacyclin Receptor	P43119	1190	ASGRDPRAPSAVPGKEGSC	Homo sapiens
1351	3921	Prostacyclin Receptor	P43119	1191	SAWGEQQVEPLPTQQ	Homo sapiens
1352	3923	Prostaglandin D2 Receptor	Q13258	458	KSPFYRCQNTTSVEKGNSAV	Homo sapiens
1353	3923	Prostaglandin D2 Receptor	Q13258	459	RNLYAMHRRRLQRHPRSC	Homo sapiens
1354	3923	Prostaglandin D2 Receptor	Q13258	503	CAEPRADGREASQPLEEL	Homo sapiens
1355	3923	Prostaglandin D2 Receptor	Q13258	504	KDVKEKNRTSEAEIDLRLR	Homo sapiens
1356	3924	Prostaglandin E Receptor EP1	P34995	962	AQAAGRLRRRRSATTF	Homo sapiens
1357	3924	Prostaglandin E Receptor EP1	P34995	963	CVGVTRPLLHAARVSVARAR	Homo sapiens
1358	3924	Prostaglandin E Receptor EP1	P34995	964	CNTLSGLALHRARWRR	Homo sapiens
1359	3924	Prostaglandin E Receptor EP1	P34995	965	ASGPDSSRRRWGAHGPR	Homo sapiens
1360	3924	Prostaglandin E Receptor EP1	P34995	966	SGSARRARAHDVEMVGQ	Homo sapiens
1361	3925	Prostaglandin E Receptor EP2	AAD44177.1	967	IALALLARRWRGDVGC	Homo sapiens
1362	3925	Prostaglandin E Receptor EP2	AAD44177.1	968	CETRQWLPPGESPAISSV	Homo sapiens
1363	3925	Prostaglandin E Receptor EP2	AAD44177.1	969	GPSLGSGRGGPGARRRGE	Homo sapiens
1364	3925	Prostaglandin E Receptor EP2	AAD44177.1	971	NETSSRKEKWDLQALR	Homo sapiens
1365	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	972	ERSAEARGNLTRPPGSGEDC	Homo sapiens
1366	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	973	SRSYRRRESKRKKSFLLC	Homo sapiens
1367	3926	Prostaglandin E2 Receptor	CAB52459.1	974	CRAKATASQSSAQWGR	Homo sapiens

1368	3926	EP3	Prostaglandin E2 Receptor	CAB52459.1	975	KFCQVANAVSSCSNDGQ	Homo sapiens
1369	3927	EP3	Prostaglandin E Receptor	P35408	382	RLSDFRRRFRRIAGAE	Homo sapiens
1370	3927	EP4	Prostaglandin E Receptor	P35408	383	EREVSKNPDLQAIRAS	Homo sapiens
1371	3927	EP4	Prostaglandin E Receptor	P35408	384	DSQRTSSAMSGHSRSFSRE	Homo sapiens
1372	3927	EP4	Prostaglandin E Receptor	P35408	385	RTLRISETSDSSQGGQDSE	Homo sapiens
1373	3928	Receptor	Prostaglandin F2-alpha	P43088	1046	ILMIKAYQRFRQKSKAS	Homo sapiens
1374	3928	Receptor	Prostaglandin F2-alpha	P43088	1047	ASDKEWIRFDQSNVLC	Homo sapiens
1375	3928	Receptor	Prostaglandin F2-alpha	P43088	1048	TKPIFHSTKITSKHVK	Homo sapiens
1376	3928	Receptor	Prostaglandin F2-alpha	P43088	1049	CFYNTEDIKDWDREFY	Homo sapiens
1377	3928	Receptor	Prostaglandin F2-alpha	P43088	1050	RVKFKSQQHIRQGGRSHLE	Homo sapiens
1378	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	252	QGTNRSSKGRSLIGKVDGTS	Homo sapiens
1379	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	253	QRVWVIVNPMGHSRKKAN	Homo sapiens
1380	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	255	SHDFRDHAKNALLCRSVR	Homo sapiens
1381	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	256	VSLTSKKHSRKSSSYS	Homo sapiens
1382	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	257	ENDTNNLAKPTLPIKTFR	Homo sapiens
1383	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	258	CPEESASHLVKNATMG	Homo sapiens
1384	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	260	QPDITTCDDVHNTCESSSP	Homo sapiens
1385	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	261	MSKTRNIHSTAYLTK	Homo sapiens
1386	4090	G Protein-Coupled Receptor GPR17	G Protein-Coupled Receptor GPR17	CAB08108.1	88	RDHKGTPANVFLMH	Homo sapiens

1387	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	90	RSLRQGLRVEKRLTKAVR	Homo sapiens
1388	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	91	RSHGASCATQRILALANR	Homo sapiens
1389	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	92	FEGKTNESSLAKSE	Homo sapiens
1390	4254	Rhodopsin	P08100	1051	RNCMLTICCGKNPLGD	Homo sapiens
1391	4254	Rhodopsin	P08100	1052	CGIDYYTLKPEVNNEFVI	Homo sapiens
1392	4254	Rhodopsin	P08100	1053	CWVPYASVAFYIFTHQGSN	Homo sapiens
1393	4254	Rhodopsin	P08100	1055	VLGGFTSLYTSLHG	Homo sapiens
1394	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1042	ATSSLLRRWPYGSDDGC	Homo sapiens
1395	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1043	CTLDYSKGDRNFTSFL	Homo sapiens
1396	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1044	MEQKLKSGHQLQVNTT	Homo sapiens
1397	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1045	MVCRGIWQCLSPQKRE	Homo sapiens
1398	4321	Secretin Receptor	P47872	950	CLQELSRREQTDLGTEQ	Homo sapiens
1399	4321	Secretin Receptor	P47872	951	CPFLRLMLTSRNGSLFRN	Homo sapiens
1400	4321	Secretin Receptor	P47872	952	CGVNVNDSSNEKRHSY	Homo sapiens
1401	4321	Secretin Receptor	P47872	954	KDAVLFSSDDVTYCDAAH	Homo sapiens
1402	4321	Secretin Receptor	P47872	956	MIRKLRTQETRGNEVSH	Homo sapiens
1403	4480	Somatostatin Receptor Type 1	P30872	994	EEPGRNASQNGTLSEG	Homo sapiens
1404	4480	Somatostatin Receptor Type 1	P30872	996	CLSWMDNAAEEPVDY	Homo sapiens
1405	4480	Somatostatin Receptor Type 1	P30872	997	EDFQPENLESGGVFRNGTC	Homo sapiens
1406	4480	Somatostatin Receptor Type 1	P30872	2616	LSVDVNMFTSYC	Homo sapiens
1407	4480	Somatostatin Receptor Type 1	P30872	2618	RAYSVEDFQPENLES	Homo sapiens
1408	4481	Somatostatin Receptor Type 2	P30874	998	RSNQWGRSSCTINWPGE	Homo sapiens
1409	4481	Somatostatin Receptor Type 2	P30874	999	KVKSSGIRVGSSKRKKSE	Homo sapiens
1410	4481	Somatostatin Receptor Type	P30874	1000	CLVKVSGTDDGERSDS	Homo sapiens

1411	4481	2	Somatostatin Receptor Type	P30874	1001	KQDKSRLNETETQRT	Homo sapiens
1412	4481	2	Somatostatin Receptor Type	P30874	2276	DMADEPLUNGSHTWLSIP	Homo sapiens
1413	4482	2	Somatostatin Receptor Type	P32745	1002	KVRSAGRRVWVAPSCQR	Homo sapiens
1414	4482	3	Somatostatin Receptor Type	P32745	2622	REGGKGEMNGRVSQI	Homo sapiens
1415	4482	3	Somatostatin Receptor Type	P32745	2624	TTSEPENASSAWPPD	Homo sapiens
1416	4482	3	Somatostatin Receptor Type	P32745	2626	QPGTSGQERPPSRVA	Homo sapiens
1417	4483	3	Somatostatin Receptor Type	P31391	1007	IFADTRPARGGQAVAC	Homo sapiens
1418	4483	4	Somatostatin Receptor Type	P31391	1008	CLLEGAGGAEEEPDLY	Homo sapiens
1419	4483	4	Somatostatin Receptor Type	P31391	2627	KMRAVALRAGWQQR	Homo sapiens
1420	4483	4	Somatostatin Receptor Type	P31391	2631	CRAVLSDGLNMFTSV	Homo sapiens
1421	4483	4	Somatostatin Receptor Type	P31391	2633	CLVGLVGNALVIFVIL	Homo sapiens
1422	4484	5	Somatostatin Receptor Type	NP_001044.1	2637	SLPLLVFADVQEGGTC	Homo sapiens
1423	4484	5	Somatostatin Receptor Type	NP_001044.1	2638	CLRKGSGAKDADATEP	Homo sapiens
1424	4484	5	Somatostatin Receptor Type	NP_001044.1	2639	RIRQQQEQEATPPAHRAAA	Homo sapiens
1425	4484	5	Somatostatin Receptor Type	NP_001044.1	2643	RVAKLASAAAWVLSLC	Homo sapiens
1426	4552	5	Tachykinin Receptor 1	AAA36641.1	1339	CMIEWPEHPNKIYKV	Homo sapiens
1427	4552	5	Tachykinin Receptor 1	AAA36641.1	1340	CPFISAGDYEGLMKSTRYL	Homo sapiens
1428	4552	5	Tachykinin Receptor 1	AAA36641.1	1341	KVSRLETTISTVGAHEE	Homo sapiens
1429	4552	5	Tachykinin Receptor 1	AAA36641.1	1342	EPEDGPKATPSSLDLTNSC	Homo sapiens
1430	4687	5	Thrombin Receptor	P25116	1202	EDEEKNESGLTEYRLV	Homo sapiens
1431	4687	5	Thrombin Receptor	P25116	2582	AVANIRSKKSRALFLSAAVFC	Homo sapiens
1432	4687	5	Thrombin Receptor	P25116	2583	SINKSSPLQKQLPAFISE	Homo sapiens



1433	4687	Thrombin Receptor	P25116	2621	DPRSFLLRNPNDKYEFWF	Homo sapiens
1434	4734	Thyrotropin Releasing Hormone Receptor	P34981	1196	PSDPKENSKTWKNDST	Homo sapiens
1435	4734	Thyrotropin Releasing Hormone Receptor	P34981	1197	CFNSTVSSRKQVTKMLA	Homo sapiens
1436	4734	Thyrotropin Releasing Hormone Receptor	P34981	1198	RAAFRKLNCNCKQKPTF	Homo sapiens
1437	4734	Thyrotropin Releasing Hormone Receptor	P34981	1199	KPANYSVALNYSVIKE	Homo sapiens
1438	4734	Thyrotropin Releasing Hormone Receptor	P34981	1200	KESDHFSTELDDITVTD	Homo sapiens
1439	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1771	EIQKNKPRNDDIFKII	Homo sapiens
1440	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1772	SYRPSDNVSSSTIKKPAPC	Homo sapiens
1441	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1773	LNSSTEDGIKRIQDDC	Homo sapiens
1442	4946	Angiotensin II Type 2 Receptor	P50052	1321	CSQKPSDKHLDAIPIL	Homo sapiens
1443	4946	Angiotensin II Type 2 Receptor	P50052	1322	DRVGSVIVPFLSQRRN	Homo sapiens
1444	4946	Angiotensin II Type 2 Receptor	P50052	1323	RKHLLKTSYGNIRITRD	Homo sapiens
1445	4946	Angiotensin II Type 2 Receptor	P50052	1324	RVPTWLQGGKRESMSC	Homo sapiens
1446	5072	Pyrimidinergic Receptor P2Y4	P51582	1142	CHDTRPEEFHDYVHFSSA	Homo sapiens
1447	5072	Pyrimidinergic Receptor P2Y4	P51582	1145	YLLTGDKYRRQLRQLC	Homo sapiens
1448	5072	Pyrimidinergic Receptor P2Y4	P51582	2696	HPLRALRWGRPRLAG	Homo sapiens
1449	5072	Pyrimidinergic Receptor P2Y4	P51582	2697	HIITRIYVLARLEADC	Homo sapiens
1450	5117	Vasopressin V1A Receptor	AAA62271.1	262	REAEALGEGNGPPRDVRNEE	Homo sapiens
1451	5117	Vasopressin V1A Receptor	AAA62271.1	263	NVRGKTASRQSKGAEQ	Homo sapiens
1452	5117	Vasopressin V1A Receptor	AAA62271.1	264	QNMKEKFNKEDTDSMSRRQ	Homo sapiens
1453	5117	Vasopressin V1A Receptor	AAA62271.1	265	RQTFYSNNRSPNTSGMWKD	Homo sapiens
1454	5118	Vasopressin V1B Receptor	AAA65687.1	266	NATPWLGDEELAKVE	Homo sapiens
1455	5118	Vasopressin V1B Receptor	AAA65687.1	267	TRGLPSRVSSINTISRAKIR	Homo sapiens

1456	5118	Vasopressin V1B Receptor	AAA65687.1	268	QPRMRRRLSDGSLSRH	Homo sapiens
1457	5118	Vasopressin V1B Receptor	AAA65687.1	269	ESPRDLELADGEGTAET	Homo sapiens
1458	5119	Vasopressin V2 Receptor	CAA77746.1	270	SNSSQERPLDTRDPLLAAE	Homo sapiens
1459	5119	Vasopressin V2 Receptor	CAA77746.1	271	RHGSGAHWNRPVLVAWAFS	Homo sapiens
1460	5119	Vasopressin V2 Receptor	CAA77746.1	272	CQVLIFREIHASLVGPSPER	Homo sapiens
1461	5119	Vasopressin V2 Receptor	CAA77746.1	273	RGRTPPSLGPQDESC	Homo sapiens
1462	5133	Peropsin	O14718	1147	KNEDGVSFQSQTEHNIV	Homo sapiens
1463	5133	Peropsin	O14718	1148	IKYKELRPTNAIIIN	Homo sapiens
1464	5133	Peropsin	O14718	1149	RKNDRSFVSMTMIVA	Homo sapiens
1465	5133	Peropsin	O14718	1150	CTESLNIRDWSDQIDVTK	Homo sapiens
1466	5133	Peropsin	O14718	1151	VANKKERRAMILAMFKC	Homo sapiens
1467	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	987	CGPAGRTSSRSQSLRSDAR	Homo sapiens
1468	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	988	EENRDKWEEAQLAGPN	Homo sapiens
1469	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	989	CRVVDREQEEGNGDSGG	Homo sapiens
1470	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	990	KRDKAPKSSFVGDGDI	Homo sapiens
1471	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	991	RKLQHAAEKDKVELGP	Homo sapiens
1472	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	981	CLRPSPEEAVAQAESEVGR	Homo sapiens
1473	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	982	GSSNDLFTTEMRYGEE	Homo sapiens
1474	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	983	MARDGISDKSKQIRAGSERC	Homo sapiens
1475	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	984	EDAPRARPEGTPRRAAK	Homo sapiens
1476	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	985	RSRTMPRTVPGSTMKMGSL	Homo sapiens
1477	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	986	KREKRWSVSSGGAAERSVC	Homo sapiens
1478	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	976	RRVFPTNFPGLQKKGE	Homo sapiens
1479	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	977	CNLTREAKRPPKKEEFG	Homo sapiens
1480	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	978	KLKHRAGQMSEPHSGLTKC	Homo sapiens

1481	5521	Inhibitor 3	Brain-Specific Angiogenesis Inhibitor 3	O60242	979	CTDNLRGADMDIVHPQER	Homo sapiens
1482	5521	Inhibitor 3	Brain-Specific Angiogenesis Inhibitor 3	O60242	980	SRSETGSTISMISLERR	Homo sapiens
1483	6031	Inhibitor 3	SIV/HIV Receptor BONZO	O00574	1101	NDSSQEEHQDFLQFSK	Homo sapiens
1484	6031		SIV/HIV Receptor BONZO	O00574	1102	KATKAYNQQAkrMTWG	Homo sapiens
1485	6031		SIV/HIV Receptor BONZO	O00574	1103	KTLLHAGGFQKHRSLK	Homo sapiens
1486	6031		SIV/HIV Receptor BONZO	O00574	1104	SLKFRKNFWKLVKDIGC	Homo sapiens
1487	6031		SIV/HIV Receptor BONZO	O00574	1105	KSSEDNSKTFASAHNV	Homo sapiens
1488	6204		Lysophosphatidic Acid Receptor Edg4	AAC27728.1	66	ERHRSVMAVQLHSLRPRGR	Homo sapiens
1489	6204		Lysophosphatidic Acid Receptor Edg4	AAC27728.1	67	RRRVQRMAEHVCHPRYRE	Homo sapiens
1490	6204		Lysophosphatidic Acid Receptor Edg4	AAC27728.1	68	NAAVYSCRDAEMRRTRRR	Homo sapiens
1491	6204		Lysophosphatidic Acid Receptor Edg4	AAC27728.1	69	RQSTRESVHYTSSAQGGAST	Homo sapiens
1492	6213		C-C Chemokine Receptor 5	AAC50598.1	38	YSQYQFWKNFQTLK	Homo sapiens
1493	6213		C-C Chemokine Receptor 5	AAC50598.1	39	GQEAPEAPASSVTRSTGEQE	Homo sapiens
1494	6213		C-C Chemokine Receptor 5	AAC50598.1	40	RSQKEGLHYTCSSHFPYSQ	Homo sapiens
1495	6213		C-C Chemokine Receptor 5	AAC50598.1	309	MDYQVSSPIYDINVTSEPC	Homo sapiens
1496	6363		Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421	1092	EDEYDVLIERGELEDEAEQC	Homo sapiens
1497	6363		Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421	1093	KGNFFSARRRVP CGIITSVL	Homo sapiens
1498	6363		Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421	1094	MRKTLRFREGRYSLFKLVFA	Homo sapiens
1499	6363		Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421	1096	RSNITPLQPRGQSAQGSRE	Homo sapiens
1500	6446		Pael Receptor (GPR37)	AAC51281.1	127	GPGNSARDVLRARAPREEQG	Homo sapiens
1501	6446		Pael Receptor (GPR37)	AAC51281.1	129	DPGPPRRGNSTNRRVRLKNP	Homo sapiens
1502	6446		Pael Receptor (GPR37)	AAC51281.1	130	LRQSKEDLGFSGRAPAERC	Homo sapiens
1503	6446		Pael Receptor (GPR37)	AAC51281.1	131	PRGAVISGRSQEQSVKTPVG	Homo sapiens
1504	6446		Pael Receptor (GPR37)	AAC51281.1	1781	CIQKSSVTSDNDNDNEYTTE	Homo sapiens
1505	6446		Pael Receptor (GPR37)	NP_005293.1	1806	CIQKSSVTSDNDNDNEYTTE	Homo sapiens
1506	6536		Putative Neurotransmitter Receptor (PNR)	O14804	319	TDVVETRLSQWLEEMPC	Homo sapiens

1507	6536	Putative Neurotransmitter Receptor (PNR)	O14804	320	KSLAGAAKHERKAAKT	Homo sapiens
1508	6536	Putative Neurotransmitter Receptor (PNR)	O14804	321	RKALKLTLSQKVFSPQTR	Homo sapiens
1509	6536	Putative Neurotransmitter Receptor (PNR)	O14804	485	HPAAFCYQVNGSCPR	Homo sapiens
1510	6777	Protein-Coupled Receptor TM7SF1	O60478	788	KAKSKYSPPELLKYRLP	Homo sapiens
1511	6777	Protein-Coupled Receptor TM7SF1	O60478	790	KTGNWERKVVSVRVA	Homo sapiens
1512	6777	Protein-Coupled Receptor TM7SF1	O60478	791	KSVHSFDYDWNVSDQAD	Homo sapiens
1513	6777	Protein-Coupled Receptor TM7SF1	O60478	792	RVRNPTKDLTNPQMVP	Homo sapiens
1514	6777	Protein-Coupled Receptor TM7SF1	O60478	793	RYDSDDDLAWNIA PQGLQ	Homo sapiens
1515	6853	Purinergic Receptor P2Y11	O43190	865	PTLSFHLKRPQQGAGNC	Homo sapiens
1516	6853	Purinergic Receptor P2Y11	O43190	866	GALGRAVLRSPGMTVAE	Homo sapiens
1517	6853	Purinergic Receptor P2Y11	O43190	867	MRVLNVDAARRRWSRRC	Homo sapiens
1518	6853	Purinergic Receptor P2Y11	O43190	868	CPGYRDSWNPEDAKSTGQA	Homo sapiens
1519	6853	Purinergic Receptor P2Y11	O43190	2299	CPANFLAAADDKLSGFQGD	Homo sapiens
1520	6853	Purinergic Receptor P2Y11	O43190	2300	ASNGALYRFSIRKQR	Homo sapiens
1521	6921	Protein-Coupled Receptor GPR39	AAC26082.1	137	CNRSSTRHIEQPETSN	Homo sapiens
1522	6921	Protein-Coupled Receptor GPR39	AAC26082.1	139	PNQIRRIMAAAKPKHD	Homo sapiens
1523	6921	Protein-Coupled Receptor GPR39	AAC26082.1	140	EKRLRVHAHSTTDSAR	Homo sapiens
1524	6921	Protein-Coupled Receptor GPR39	AAC26082.1	141	VQRPLLFASTRQSSARRTEK	Homo sapiens
1525	6921	Protein-Coupled Receptor GPR39	AAC26082.1	142	QSEAE PQSKSQSLLESLEP	Homo sapiens
1526	7221	Galanin Receptor GalR2	AAC39634.1	197	NLTVCHPAWSAPRRRAMD	Homo sapiens
1527	7221	Galanin Receptor GalR2	AAC39634.1	198	RAVDPVAAGSGARRAKRK	Homo sapiens
1528	7221	Galanin Receptor GalR2	AAC39634.1	199	GRAPGRASGRVCAAAARG	Homo sapiens
1529	7221	Galanin Receptor GalR2	AAC39634.1	200	ERESDLLHMEAAAGALRPC	Homo sapiens
1530	7246	Orexin Receptor 1	AAC39601.1	235	DQLGDLEQGLSGEPQP	Homo sapiens
1531	7246	Orexin Receptor 1	AAC39601.1	236	EPSATPG AQMGVPPGSR	Homo sapiens

1532	7246	Orexin Receptor 1	AAC39601.1	237	KRPDQLGLDLEQGLSGEPQ	Homo sapiens
1533	7246	Orexin Receptor 1	AAC39601.1	239	KAPSPRSSASHKSLSLQSRC	Homo sapiens
1534	7247	Orexin Receptor 2	AAC39602.1	240	SELNETQEPFLNPTDYDDEE	Homo sapiens
1535	7247	Orexin Receptor 2	AAC39602.1	241	KWKPLQPVSQPRGPGQ	Homo sapiens
1536	7247	Orexin Receptor 2	AAC39602.1	242	TKSRMSAVAAEIKQIRA	Homo sapiens
1537	7247	Orexin Receptor 2	AAC39602.1	243	RQEDRLTRGRTSTESRKS	Homo sapiens
1538	8436	Platelet-Activating Factor Receptor	P25105	1097	AVTRPIKTAQANTRKR	Homo sapiens
1539	8436	Platelet-Activating Factor Receptor	P25105	1098	DSTNTVPDSAGSGNVTRC	Homo sapiens
1540	8436	Platelet-Activating Factor Receptor	P25105	1099	QQRNAEVKRRALWMVC	Homo sapiens
1541	8436	Platelet-Activating Factor Receptor	P25105	1100	KKFRKHLTEKFYSMRSSRKC	Homo sapiens
1542	8509	G Protein-Coupled Receptor Ls8509	Q14439	398	DRYYSVLYPLERKISDAKSR	Homo sapiens
1543	8509	G Protein-Coupled Receptor Ls8509	Q14439	400	DEESEAKEYIGSADFQAKE	Homo sapiens
1544	8509	G Protein-Coupled Receptor Ls8509	Q14439	401	ETRNSKKRLPLPLGNTPPE	Homo sapiens
1545	8509	G Protein-Coupled Receptor Ls8509	Q14439	402	ELUQTKVPKVGRVERKMSR	Homo sapiens
1546	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1078	KKQRKAQNFTSILIAN	Homo sapiens
1547	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1079	FRNLSLPTDLYTHQVAC	Homo sapiens
1548	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1080	CVENWPSKKDRLLFTT	Homo sapiens
1549	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1081	CLRRRNAKVDDKKKENEGR	Homo sapiens
1550	9421	Neuropeptide Y Receptor Type 1	P25929	1064	DEPFQNVTLDAYKDKYVC	Homo sapiens
1551	9421	Neuropeptide Y Receptor Type 1	P25929	1065	CYFKIYIRLKRNNIMMDK	Homo sapiens
1552	9421	Neuropeptide Y Receptor Type 1	P25929	1066	CDFRSRDDDDYETIAMS	Homo sapiens
1553	9421	Neuropeptide Y Receptor Type 1	P25929	1498	ENDDCHLPLAMIFTLALA	Homo sapiens
1554	9421	Neuropeptide Y Receptor Type 1	P25929	2291	SNFSEKNAQLLAFENDDC	Homo sapiens

1555	9834	Type 1 Corticotropin releasing factor Receptor 1	NP_004373.1	1778	CESLSLASISDNGYRE	Homo sapiens
1556	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	1779	CQEILNEEKSKVHYHVA	Homo sapiens
1557	10457	Frizzled-2	NP_001457.1	1774	NHSEDGAPALLTAPP	Homo sapiens
1558	10457	Frizzled-2	NP_001457.1	1775	GGAPPRYATLEHPFHC	Homo sapiens
1559	10457	Frizzled-2	NP_001457.1	1776	CEPARPDGSMFSGEE	Homo sapiens
1560	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1082	AAREAGAAVRRPLGPE	Homo sapiens
1561	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1083	LYRRRPPREKIGRRRA	Homo sapiens
1562	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1085	PRELAAGQSFHGCCLYR	Homo sapiens
1563	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1086	CKTVRLSDVRVRPVNTIYAR	Homo sapiens
1564	14198	Interleukin-8 Receptor B	P25025	802	EDFWKGEDLSNYSYS	Homo sapiens
1565	14198	Interleukin-8 Receptor B	P25025	803	PPFLDAAAPCEPESLE	Homo sapiens
1566	14198	Interleukin-8 Receptor B	P25025	804	RRTVYSSNVSPACYE	Homo sapiens
1567	14198	Interleukin-8 Receptor B	P25025	805	SKDSLPKDSRPSFVGS	Homo sapiens
1568	14641	Calcitonin Receptor	P30988	766	PKPFLYVVGRRKKMMDAQYKC	Homo sapiens
1569	14641	Calcitonin Receptor	P30988	769	VEVVPNGELVRRDPVSC	Homo sapiens
1570	14641	Calcitonin Receptor	P30988	771	KIQWNQIRWGRRPSNRS	Homo sapiens
1571	14641	Calcitonin Receptor	P30988	772	CHQEPRNEPANNGEESAE	Homo sapiens
1572	16041	C-C Chemokine Receptor 6	P51684	355	TKSFRILRSRTLPRSKIIC	Homo sapiens
1573	16041	C-C Chemokine Receptor 6	P51684	356	STFVFNQKYNTQGSDVCE	Homo sapiens
1574	16041	C-C Chemokine Receptor 6	P51684	357	TAANLGKMINRSCQSE	Homo sapiens
1575	16041	C-C Chemokine Receptor 6	P51684	358	RYSENISRQTSSETADNDNAS	Homo sapiens
1576	16599	Smoothed	NP_005622.1	2595	CPLAPPELHPPAPAP	Homo sapiens
1577	16599	Smoothed	NP_005622.1	2666	CAIVERERGWPDFLR	Homo sapiens
1578	16599	Smoothed	NP_005622.1	2667	CTNEVQNIKFNSSGQ	Homo sapiens
1579	16599	Smoothed	NP_005622.1	2668	CEVPLVRTDNPKSWYE	Homo sapiens
1580	16599	Smoothed	NP_005622.1	2669	CRADGTMRLGEPTSNE	Homo sapiens

1581	16599	Smoothed	NP_005622.1	2670	EAEISPELQRLGRKK	Homo sapiens
1582	16599	Smoothed	NP_005622.1	2671	ANVTIGLPTKQIPDC	Homo sapiens
1583	17250	G Protein-Coupled Receptor GPR45	O43898	1227	SNASDSGSTQLPAPLR	Homo sapiens
1584	17250	G Protein-Coupled Receptor GPR45	O43898	1228	CVLGYTELPADRAYW	Homo sapiens
1585	17250	G Protein-Coupled Receptor GPR45	O43898	1249	LNTVRKNVAVRVHNQSD	Homo sapiens
1586	17250	G Protein-Coupled Receptor GPR45	O43898	1272	KVPERIRRRIQPSTVYC	Homo sapiens
1587	17250	G Protein-Coupled Receptor GPR45	O43898	1273	DSLDLRQLTRAGLRRL	Homo sapiens
1588	17345	G Protein-Coupled Receptor D6	LR13	363	EDADAENSSFYYDYLDE	Homo sapiens
1589	17345	G Protein-Coupled Receptor D6	LR13	364	DKYLEIVHAQPYHRLRTR	Homo sapiens
1590	17345	G Protein-Coupled Receptor D6	LR13	365	CVLVRIRPAGQGRALK	Homo sapiens
1591	17345	G Protein-Coupled Receptor D6	LR13	366	DLGERQSENVPNKEDVGNK	Homo sapiens
1592	17535	Gaba(b) Receptor 1	O95375	188	EKLTKRLKRHPETGGFQEA	Homo sapiens
1593	17535	Gaba(b) Receptor 1	O95375	189	KKEEKKEWRKTLPEWK	Homo sapiens
1594	17535	Gaba(b) Receptor 1	O95375	190	DPLHRTIETFAKEPKEDID	Homo sapiens
1595	17535	Gaba(b) Receptor 1	O95375	191	YEIEWVCRGEREVGPKVRK	Homo sapiens
1596	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1205	SLWETVQKWREYRRQC	Homo sapiens
1597	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1206	LQKDNSSLPWRDLSEC	Homo sapiens
1598	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1208	CIVVSKLKANLMCKTD	Homo sapiens
1599	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1209	RWRLEHLHIQRDSSMKPLKC	Homo sapiens
1600	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1520	CQVDETEEPDVHLPQP	Homo sapiens
1601	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1521	REGLEAAGAAGASAAASYSS	Homo sapiens
1602	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1522	KLPSARAKIRITSSPI	Homo sapiens
1603	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1523	ESKSSIKRVLAITTVLS	Homo sapiens

1604	18471	Receptor LOC51210 G Protein-Coupled	NP_057456.1	1524	QGTLEILYPD AHLSAED	Homo sapiens
1605	18471	Receptor LOC51210 G Protein-Coupled	NP_057456.1	1525	PKTPLKERISLPSRRS	Homo sapiens
1606	19072	Receptor LOC51210 G Protein-Coupled	ENSP00000164265	2030	SVVQLRRQRPD FEWNEGLC	Homo sapiens
1607	19072	Receptor Ls19072 G Protein-Coupled	ENSP00000164265	2032	PAVGWHDTSERFYTHGC	Homo sapiens
1608	19072	Receptor Ls19072 G Protein-Coupled	ENSP00000164265	2047	AVQVGRQADRRRAFTVPT	Homo sapiens
1609	19501	Receptor Ls19072 G Protein-Coupled	Q9UIZ3	1513	EHEPAGEEALRQKRAVATK	Homo sapiens
1610	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1514	ALRQKRAVATKSPTAE	Homo sapiens
1611	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1515	CEKEVLSSNVSWRYEEQQLE	Homo sapiens
1612	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1518	RLANNTGGWDSSGCWVEEGD	Homo sapiens
1613	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1519	CKQEKSLFQISKSIG	Homo sapiens
1614	21632	Receptor KIAA0758 G Protein-Coupled	BAA96055.1	2164	CTAFQRREGGVPGTRPGSPG	Homo sapiens
1615	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2166	APGTRASRRCDRAGRWE	Homo sapiens
1616	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2167	CPAERVANNRGDFRWPR	Homo sapiens
1617	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2171	QNPPEPEPPADQQLRFRC	Homo sapiens
1618	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2175	VPLGGGAPGTRASRRC	Homo sapiens
1619	22315	Receptor Ls21632 G Protein-Coupled	LR29	425	PAARVHRPSRCRYRD	Homo sapiens
1620	22315	Receptor GPR92/GPR93 G Protein-Coupled	LR29	426	TLARPDATQSQRRRKTVRL	Homo sapiens
1621	22315	Receptor GPR92/GPR93 G Protein-Coupled	LR29	427	RSKLVAASVPARDRVRG	Homo sapiens
1622	22315	Receptor GPR92/GPR93 G Protein-Coupled	LR29	428	AGSERSAVTTDATRPD	Homo sapiens



1623	22925	Latrophilin-3	O94867	1138	CSGKSTESSIGSGKTSGR	Homo sapiens
1624	22925	Latrophilin-3	O94867	1140	ENHQPHHYTRRRIPQD	Homo sapiens
1625	22925	Latrophilin-3	O94867	1141	ESVTSTQTEPPPAKC	Homo sapiens
1626	22925	Latrophilin-3	O94867	1497	SSASLNREGLLNNARD	Homo sapiens
1627	25359	G Protein-Coupled Receptor GPR34	O95853	1255	DRYKINRSIQQRKAIT	Homo sapiens
1628	25359	G Protein-Coupled Receptor GPR34	O95853	1257	CFHYRDKHNAKGEAIFN	Homo sapiens
1629	25359	G Protein-Coupled Receptor GPR34	O95853	1258	RISKRRSKFPNSGKYA	Homo sapiens
1630	25359	G Protein-Coupled Receptor GPR34	O95853	1259	CQLLFRFRFQGEPSRSESTSE	Homo sapiens
1631	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2721	RLQEILTFEKINKTR	Homo sapiens
1632	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2722	KGKSRAAENASLGPTN	Homo sapiens
1633	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2723	LLFGTIMDHIKIRDALR	Homo sapiens
1634	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2724	RPSIGSSKSQDVVIMRI	Homo sapiens
1635	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1579	KLPNNELHGQESHNSGN	Homo sapiens
1636	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1580	SGNRSDGPGKNTTLHNEFD	Homo sapiens
1637	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1581	RQFISQSSRRKRKHNGSIR	Homo sapiens
1638	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1582	SHLDRLDESAQKILYYC	Homo sapiens
1639	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1584	CRSFSRRLFKKSNIRTRSE	Homo sapiens
1640	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1585	ESIRSLQSVRRSEVRIVYD	Homo sapiens
1641	31568	G Protein-Coupled Receptor RE2	O75963	331	CRKELSNLTEEGEGEGGV	Homo sapiens
1642	31568	G Protein-Coupled Receptor RE2	O75963	332	EEDAQRTRGRKNSSTSTSSS	Homo sapiens
1643	31568	G Protein-Coupled Receptor RE2	O75963	333	CFGDRYYREPFPVQRQRISR	Homo sapiens
1644	31568	G Protein-Coupled Receptor RE2	O75963	334	HSSSTGDTGTFSCSQDQSGNL	Homo sapiens

1645	36534	Receptor RE2	O75473	1232	CQKLQKIDLRHNEIVEIKVD	Homo sapiens
1646	36534	G Protein-Coupled Receptor GPR49	O75473	1233	NKGDNSSMDDLHKDA	Homo sapiens
1647	36534	G Protein-Coupled Receptor GPR49	O75473	1234	QDERDLEDFLDFFED	Homo sapiens
1648	36534	G Protein-Coupled Receptor GPR49	O75473	1235	ERGSVKYSAKFETKA	Homo sapiens
1649	36534	G Protein-Coupled Receptor GPR49	O75473	1236	RSKHPSLMSINSDDVEKQSC	Homo sapiens
1650	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2597	DAQKESTGVTLRQRR	Homo sapiens
1651	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2600	CKKINQLISETAEVVTN	Homo sapiens
1652	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2610	ADDQTLLEQMMDDQDDG	Homo sapiens
1653	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2672	KYNGSISLRRPRLASQ	Homo sapiens
1654	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2673	KRYFAKFEKFFQTC	Homo sapiens
1655	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2674	DGDRQKAMKRLRPPL	Homo sapiens
1656	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2103	RVRSGRVRSYSTRDFQDC	Homo sapiens
1657	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2105	CNNSVPGKEHPFDITVMIRE	Homo sapiens
1658	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2106	APSKPGLPKPQATVPRKVD	Homo sapiens
1659	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2135	AASKPKSTPAVIQGPSKGD	Homo sapiens
1660	42697	G Protein-Coupled Receptor GPR64	O00406	1261	KRSELNKTILQTLSETYFIMC	Homo sapiens
1661	42697	G Protein-Coupled Receptor GPR64	O00406	1262	GNASTERNGVSFSVQNGDVC	Homo sapiens
1662	42697	G Protein-Coupled Receptor GPR64	O00406	1263	CRISLKKQLGAGIKTSIQD	Homo sapiens
1663	42697	G Protein-Coupled Receptor GPR64	O00406	1264	DFTGKGHMFNEKEDSC	Homo sapiens

1664	45937	KIAA1624 Protein	AAK57695	2072	PNVNPASAGNQTKTQD	Homo sapiens
1665	45937	KIAA1624 Protein	AAK57695	2073	RVKSPPEAGTQLPKIFS	Homo sapiens
1666	45937	KIAA1624 Protein	AAK57695	2074	KDGYMNVNVSLSLNEPED	Homo sapiens
1667	45937	KIAA1624 Protein	AAK57695	2076	RSTVDSKAMGEKSFVHNNG	Homo sapiens
1668	50847	Neurotensin Receptor type 2	O95665	1265	CQPLRARSLTPRRTR	Homo sapiens
1669	50847	Neurotensin Receptor type 2	O95665	1266	GQKHELETADGEPEASRVC	Homo sapiens
1670	50847	Neurotensin Receptor type 2	O95665	1267	KKTFIQGGQVSLVRHKD	Homo sapiens
1671	50847	Neurotensin Receptor type 2	O95665	1269	CGEHHPMKRLPPKPQSP	Homo sapiens
1672	50847	Neurotensin Receptor type 2	O95665	2294	STSTPGSSTPSRLELLSEE	Homo sapiens
1673	50847	Neurotensin Receptor type 2	O95665	2301	METSSPRPPRPSSNPG	Homo sapiens
1674	50847	Neurotensin Receptor type 2	O95665	2302	CSQVPSTSTPGSSTPSR	Homo sapiens
1675	53440	G Protein-Coupled Receptor LS53440	LR76	1850	DPNGNESSATYFIUG	Homo sapiens
1676	53440	G Protein-Coupled Receptor LS53440	LR76	1851	RHATVTLPRVTIGV	Homo sapiens
1677	53440	G Protein-Coupled Receptor LS53440	LR76	1852	ILKTVLGLTREAAQAKA	Homo sapiens
1678	53440	G Protein-Coupled Receptor LS53440	LR76	1853	HRFSKRDRDSPLPVILAN	Homo sapiens
1679	53440	G Protein-Coupled Receptor LS53440	LR76	1854	KEIRQRILRLHFVATHASE	Homo sapiens
1680	54053	Gaba(b) Receptor 2	O75899	1416	GEDIEISDTESFSNDPC	Homo sapiens
1681	54053	Gaba(b) Receptor 2	O75899	1417	SSKQIKTISGKTPQQYE	Homo sapiens
1682	54053	Gaba(b) Receptor 2	O75899	1419	AATQNRFRFQFTQNGKKE	Homo sapiens
1683	54053	Gaba(b) Receptor 2	O75899	1420	CKDPIEDINSPEHIQRR	Homo sapiens
1684	55728	ETL protein	NP_071442.1	2113	CVLSRKIQEEYVRLFKNVP	Homo sapiens
1685	55728	ETL protein	NP_071442.1	2114	CIAANINKTLTKIRSIKEP	Homo sapiens
1686	55728	ETL protein	NP_071442.1	2115	KL SVNHRRTHTLKLMTVE	Homo sapiens
1687	55728	ETL protein	NP_071442.1	2116	EKITFTLSHRKVTDYRSLC	Homo sapiens
1688	55728	ETL protein	NP_071442.1	2117	SSSLLGYKNNTISAKD	Homo sapiens
1689	56923	Muscarinic acetylcholine	P20309	1421	CSSYELQQQSMKRSNRK	Homo sapiens

1690	56923	Receptor M3 Muscarinic acetylcholine Receptor M3	P20309	1422	KPSEQMDQDHSSDSWNNN	Homo sapiens
1691	56923	Muscarinic acetylcholine Receptor M3	P20309	1423	DLERKADKLQAQKSVD	Homo sapiens
1692	56923	Muscarinic acetylcholine Receptor M3	P20309	1424	KEATLAKRFALKTRSQ	Homo sapiens
1693	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2097	PPTCRPRRMVSVYRPPGNE	Homo sapiens
1694	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2098	CLAVTRPFLAPRLRSPALAR	Homo sapiens
1695	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2099	RGARWGSGRHGARVGR	Homo sapiens
1696	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2100	TAGDLLPRAGPRFLTR	Homo sapiens
1697	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2101	EGSGEARGGGRSREGTME	Homo sapiens
1698	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2102	RTTQLKVVVGQGRGNGD	Homo sapiens
1699	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1909	RSAPTALSRRLRARATHLPGC	Homo sapiens
1700	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1910	VRGSHGEPDASLMRSC	Homo sapiens
1701	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1911	RKEDSVLMEATSGGPTSFR	Homo sapiens
1702	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1912	DQNKADIGGMLPGLTVRSV	Homo sapiens
1703	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1913	PAGWPDQSLAESDSEDPG	Homo sapiens
1704	74514	5-HT5A Receptor	NP_076917.1	2118	ETNHSLGKDDLRPSSP	Homo sapiens
1705	74514	5-HT5A Receptor	NP_076917.1	2119	SLVHELSGRRWQLGRRLC	Homo sapiens
1706	74514	5-HT5A Receptor	NP_076917.1	2120	LLFGWGETYSEGSEEC	Homo sapiens
1707	74514	5-HT5A Receptor	NP_076917.1	2121	FRVGSRKTNVSPISPE	Homo sapiens
1708	74514	5-HT5A Receptor	NP_076917.1	2122	RHATVTFQPEGDTWREQK	Homo sapiens

1709	81765	Thromboxane A2 Receptor	P21731	1277	GITRPFSPAVASQRR	Homo sapiens
1710	81765	Thromboxane A2 Receptor	P21731	1278	CHVYHGQEAQQRPDSEVE	Homo sapiens
1711	81765	Thromboxane A2 Receptor	P21731	1279	RNPPAMSPAGQLSRITE	Homo sapiens
1712	81765	Thromboxane A2 Receptor	P21731	1280	RRLQPRLSLRPRRVSLC	Homo sapiens
1713	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	155	RYLSVVSPLSLRVPTLRC	Homo sapiens
1714	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	156	SSILDTFHFKVLSSGCDYSE	Homo sapiens
1715	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	157	VEILTLFRSRKRHRITVK	Homo sapiens
1716	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	158	QTLFRTQIIRSCEAKQQL	Homo sapiens
1717	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	159	RLQAPSPASIPSPGAFAYE	Homo sapiens
1718	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1589	RIEYYSIYNSSPSQEE	Homo sapiens
1719	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1590	IMIAQTLRKNAQVRKC	Homo sapiens
1720	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1591	RNQNYNKLQHVQTRGYTKS	Homo sapiens
1721	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1592	SRLQLVSAINLSTAKD	Homo sapiens
1722	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1593	CKQKTRLRAMGKGNLEVR	Homo sapiens
1723	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1594	NSAYMLSPKPKKKFVDQAC	Homo sapiens
1724	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1218	CKVQDSNRRKMLPTQF	Homo sapiens
1725	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1219	HAVSLTKLVGRKPLS	Homo sapiens
1726	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1220	NVNVFELSAPRRNED	Homo sapiens
1727	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1221	TKQRNPMIDYPVEDAFC	Homo sapiens
1728	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1222	CKPQLVKKSYGVENRA	Homo sapiens
1729	152198	Tachykinin Receptor 2	AAB05897.1	1286	RRVPVGHQAHAHANLRH	Homo sapiens
1730	152198	Tachykinin Receptor 2	AAB05897.1	1287	KEDKLELTPTTSLSTRVNRC	Homo sapiens
1731	152198	Tachykinin Receptor 2	AAB05897.1	1288	KETLFMAGDTAPSEATSGEA	Homo sapiens

1732	152198	Tachykinin Receptor 2	AAB05897.1	1290	CVVAWPEDSGGKTL	Homo sapiens
1733	152201	Thyrotropin Receptor	P16473	1445	RGRKSVNALNSPLHQE	Homo sapiens
1734	152201	Thyrotropin Receptor	P16473	1446	KFQDTHNNAHVYVFFEEQED	Homo sapiens
1735	152201	Thyrotropin Receptor	P16473	1449	CHVKYITVRNPQYNPGDK	Homo sapiens
1736	152201	Thyrotropin Receptor	P16473	1450	CKRQAQAYRGQRVPKKNSTD	Homo sapiens
1737	152245	C-C Chemokine Receptor 2	NP_000639.1	1896	SRSRFRINTESGEEVIT	Homo sapiens
1738	152245	C-C Chemokine Receptor 2	NP_000639.1	1898	CQKEDSVVCGPYFPRGWNIN	Homo sapiens
1739	152245	C-C Chemokine Receptor 2	NP_000639.1	1899	SGEEVTIFFDYDGAPCHKF	Homo sapiens
1740	152299	Interleukin-8 Receptor A	P25024	806	DFDDLNTGMPPADEYSPC	Homo sapiens
1741	152299	Interleukin-8 Receptor A	P25024	807	CWGLSMNLSLPFLFRQAYH	Homo sapiens
1742	152299	Interleukin-8 Receptor A	P25024	808	RHRVTSYSSSVNVSSN	Homo sapiens
1743	152299	Interleukin-8 Receptor A	P25024	1490	CMLTETLNKYVVIAYALV	Homo sapiens
1744	158822	Mas Proto-Oncogene	NP_002368.1	1527	EEPINISTGRNASVGNHRQ	Homo sapiens
1745	158822	Mas Proto-Oncogene	NP_002368.1	1528	RRNPFTVYTHLSIAD	Homo sapiens
1746	158822	Mas Proto-Oncogene	NP_002368.1	1529	YVMCIDREEESHNRNDCRAV	Homo sapiens
1747	158822	Mas Proto-Oncogene	NP_002368.1	1530	SSTILVVKIRKNTWASHSK	Homo sapiens
1748	158822	Mas Proto-Oncogene	NP_002368.1	1531	TRAFKDEMQPRRQKDNK	Homo sapiens
1749	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1578	ERYLGVAFPVQYKLSRRPL	Homo sapiens
1750	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1586	QYLNTTEQVRSGNEITC	Homo sapiens
1751	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1588	EGTNEDRGVGGEGMPSSD	Homo sapiens
1752	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1616	RGLQVLNRNQGSLLGRRGKD	Homo sapiens
1753	159973	Vasoactive Intestinal Receptor	P32241	1292	KQCLEEAQLENETIGCS	Homo sapiens
1754	159973	Vasoactive Intestinal Receptor	P32241	1296	KDLALFDSGESDQCSE	Homo sapiens
1755	159973	Vasoactive Intestinal Receptor	P32241	1297	LQKLRPPIRKSDDSP	Homo sapiens
1756	159973	Vasoactive Intestinal Receptor	P32241	1298	NPKYRHPGGSGNGATC	Homo sapiens
1757	160040	Vasoactive Intestinal Receptor	P41587	1299	KVFSNFYSKAGNISKNC	Homo sapiens
1758	160040	Vasoactive Intestinal Receptor	P41587	1301	CGYSDPEDESKIFYI	Homo sapiens
1759	160040	Vasoactive Intestinal Receptor	P41587	1305	KRKWRSRCPTPSASRD	Homo sapiens

1760	160040	Polypeptide Receptor 2	P41587	1306	CGSSFSRNGSEGAHQFHR	Homo sapiens
		Vasoactive Intestinal				
1761	160055	Polypeptide Receptor 2	AAC26081.1	132	REPPWPALPPCDERRCS	Homo sapiens
1762	160055	Motilin Receptor (GPR38)	AAC26081.1	134	SPSPGPETAEEAAALFSREC	Homo sapiens
1763	160055	Motilin Receptor (GPR38)	AAC26081.1	135	SSRRPLRGPAASGRERGRHQ	Homo sapiens
1764	160055	Motilin Receptor (GPR38)	AAC26081.1	136	RKSRPRGFHRSRD TAG	Homo sapiens
1765	160059	G Protein-coupled Receptor	NP_005294.1	1595	NPLVTGYLGRGPGLKTVG	Homo sapiens
		GPR40				
1766	160059	G Protein-coupled Receptor	NP_005294.1	1596	GRYLGAAFPLGYQAFRRPC	Homo sapiens
		GPR40				
1767	160059	G Protein-coupled Receptor	NP_005294.1	1597	CLEAWDPASAGPARFS	Homo sapiens
		GPR40				
1768	160059	G Protein-coupled Receptor	NP_005294.1	1598	CLRALARSGLTHRRKLR	Homo sapiens
		GPR40				
1769	160059	G Protein-coupled Receptor	NP_005294.1	1599	NASNVASFLYPNLGGSWRK	Homo sapiens
		GPR40				
1770	160059	G Protein-coupled Receptor	NP_005294.1	1617	TVSLPLKAVEALASGA	Homo sapiens
		GPR40				
1771	160059	G Protein-coupled Receptor	NP_005294.1	1618	DHSNTSLGINTPVNGSPVC	Homo sapiens
		GPR40				
1772	160189	G Protein-Coupled	BAB55446	1926	CSEAFPSRALERAFALY	Homo sapiens
		Receptor GPR54				
1773	160189	G Protein-Coupled	BAB55446	1927	ERAGAVRAKVSRLVAAVV	Homo sapiens
		Receptor GPR54				
1774	160189	G Protein-Coupled	BAB55446	1928	RRPGSPDPAAPHAEHLRLGS	Homo sapiens
		Receptor GPR54				
1775	160189	G Protein-Coupled	BAB55446	1929	GAPANASGCPGCCGANASD	Homo sapiens
		Receptor GPR54				
1776	160202	Adrenomedullin Receptor	O15218	390	DLFNHTLSECHVELSQST	Homo sapiens
		(ADMIR)				
1777	160202	Adrenomedullin Receptor	O15218	391	NVLTACRLRQPGQPKSRHRC	Homo sapiens
		(ADMIR)				
1778	160202	Adrenomedullin Receptor	O15218	392	KDQTKAGTCASSSSCSTQ	Homo sapiens
		(ADMIR)				
1779	160202	Adrenomedullin Receptor	O15218	484	KGDSQPAAAAAPHPEPSLS	Homo sapiens
		(ADMIR)				
1780	160204	G Protein-Coupled	LR85	1977	CRARRRQRSTKLNHVILA	Homo sapiens
		Receptor RTA				

1781	160204	G Protein-Coupled Receptor RTA	LR85	1983	CPGLSEAPELYRRGFLIEQ	Homo sapiens
1782	160204	G Protein-Coupled Receptor RTA	LR85	1985	RDGAELGEAGGSTPNTVT	Homo sapiens
1783	160204	G Protein-Coupled Receptor RTA	LR85	2173	LAGRDKSQRLWEPLRV	Homo sapiens
1784	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1678	RTTRKWNNGCTHCYLAFNSD	Homo sapiens
1785	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1679	RAKLIREGWVHANRPKR	Homo sapiens
1786	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1680	RRVMLKEIYHPRMILLI	Homo sapiens
1787	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1682	SALARAFGEFFLSSC	Homo sapiens
1788	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1683	RSCSRKMINSSGCLSEE	Homo sapiens
1789	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	151	PGPDRDATCNSRQAALAVSK	Homo sapiens
1790	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	152	SSHAAVSLRLQHRGRRRGR	Homo sapiens
1791	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	153	DDSELGGAGSSRRRTSSTA	Homo sapiens
1792	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	154	DGPPEPGAEGHLELEPGRR	Homo sapiens
1793	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2220	CPILEQMSRLQSHSNTSIRY	Homo sapiens
1794	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2221	RYIDHAAVLLHGLASLLGLV	Homo sapiens
1795	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2222	CRMRTQTVTTWVHLALSDL	Homo sapiens
1796	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2223	SASLPFFTYFLAVGHSWE	Homo sapiens
1797	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2224	CLVLWALAVLNTVPYFVFRD	Homo sapiens
1798	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2225	CYNNVLLNPGPDRDAT	Homo sapiens
1799	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2226	CNSRQAALAVSKFLAFLVP	Homo sapiens
1800	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2228	RGLPFVTSIAFFNSVANPVL	Homo sapiens



1801	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2229	CSRPEEPRGPARIILGWLLGS	Homo sapiens
1802	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2230	CAASPQTGPLNIRALSS	Homo sapiens
1803	160212	Receptor GPR44 (CRTH2) G Protein-Coupled	Q9Y2T5	444	KEINDRRARFPSHEVDSSRE	Homo sapiens
1804	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	445	CVKDQEAQEPKPRKRANS	Homo sapiens
1805	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	446	RWTEWRILNMSSGIVNASER	Homo sapiens
1806	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	622	HSCPLGFGHYVWVDCIFE	Homo sapiens
1807	160217	Receptor GPR52 G Protein-Coupled	AAD22410.1	161	GKVEKYMCFHNMSDDTWSAK	Homo sapiens
1808	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	162	RSIHILLGRRDHTQDWVQQK	Homo sapiens
1809	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	163	CRAKQSISFFLQLSM	Homo sapiens
1810	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	164	KEFRMNIRAHRPSRVQLVLQ	Homo sapiens
1811	160219	Receptor GPR55 G Protein-Coupled	AAC52028.1	2	AQRPTDVGGQAEATRKAAR	Homo sapiens
1812	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	3	KEFQEASALAVAPRAKAHK	Homo sapiens
1813	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	123	GGFCFRSTRHNFNSMR	Homo sapiens
1814	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	125	ETIRRALYITSKLSDANC	Homo sapiens
1815	160221	Receptor GPR35 G Protein-Coupled	LR6	335	FPVLDGGGDDDEDAPCALEQ	Homo sapiens
1816	160221	Receptor GPR27 G Protein-Coupled	LR6	338	RGARRLLVLEEFKTEKRLC	Homo sapiens
1817	160221	Receptor GPR27 G Protein-Coupled	LR6	496	NASEPGSGGGGEEAALGLK	Homo sapiens
1818	160221	Receptor GPR27 G Protein-Coupled	O54897	515	GLRALACLPAVMLAARRA	Mus musculus
1819	160221	Receptor GPR27 G Protein-Coupled	LR6	1291	RPAGPGRGARLLVLE	Homo sapiens

1820	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1606	CQRPPKQEDGQPSV	Homo sapiens
1821	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1607	CNMIGDVTEQYFALRRK	Homo sapiens
1822	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1610	EGRADQSAAEALAVP	Homo sapiens
1823	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1611	QNFVGRRRYGAESQNPTVK	Homo sapiens
1824	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1600	RIFRSIKQSMGLSAAQKAK	Homo sapiens
1825	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1601	CDRFVAVVVALESRRR	Homo sapiens
1826	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1604	ATDHSRQEVSRHKGWKE	Homo sapiens
1827	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1605	KTDVTRLTHSRDTEELQS	Homo sapiens
1828	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	403	ETQEQQSRSKRGTEDEEAK	Homo sapiens
1829	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	404	SPNPDKDGGTIDSGQELR	Homo sapiens
1830	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	405	CQLVTWRVRGPPGRKSE	Homo sapiens
1831	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	406	AANGSDNKLKTEVSS	Homo sapiens
1832	160225	Sphingolipid Receptor Edg6	CAA04118.1	70	PRDSFRGSRSLFRMRE	Homo sapiens
1833	160225	Sphingolipid Receptor Edg6	CAA04118.1	71	ERFATMVRPVAESGATKTSR	Homo sapiens
1834	160225	Sphingolipid Receptor Edg6	CAA04118.1	72	RLVQASGQKAPRPAAR	Homo sapiens
1835	160225	Sphingolipid Receptor Edg6	CAA04118.1	73	RAVEAHSGASTDSSLRPRD	Homo sapiens
1836	160225	Sphingolipid Receptor Edg6	CAA04118.1	1914	IFRLVQASGQKAPRPAAR	Homo sapiens
1837	160225	Sphingolipid Receptor Edg6	CAA04118.1	1915	DSSLRPRDSFRGSRSLFRM	Homo sapiens
1838	160225	Sphingolipid Receptor Edg6	CAA04118.1	1916	RSLSFRMIREPLSSISVR	Homo sapiens
1839	160225	Sphingolipid Receptor Edg6	CAA04118.1	1917	GPEDGGGLGALRGLSVAASC	Homo sapiens
1840	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1625	ANIGSLCVSFLQPKKE	Homo sapiens
1841	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1626	ETIFNAVMLWEDETWE	Homo sapiens
1842	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1627	CNRKVYQAVRHNKATENKE	Homo sapiens

1843	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1628	CILEHAVNFEDHNSGKR	Homo sapiens
1844	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1629	CNTSQRRKRILSVSTKD	Homo sapiens
1845	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	2303	CDAEKSNTLCYDKYPLEK	Homo sapiens
1846	160300	Encephalopsin	NP_055137.1	2131	CTVDWKSNDANDSSFV	Homo sapiens
1847	160300	Encephalopsin	NP_055137.1	2132	CVEDLQTQVIKILKYK	Homo sapiens
1848	160300	Encephalopsin	NP_055137.1	2133	CGRPAKDLPAAGSEMQRIP	Homo sapiens
1849	160300	Encephalopsin	NP_055137.1	2134	TSDESLVDDSDKTIG	Homo sapiens
1850	160312	Sphingolipid Receptor Edg5	O95136	1018	ERHVAIAKVLYGSDKSC	Homo sapiens
1851	160312	Sphingolipid Receptor Edg5	O95136	1019	RSRDLRREVLRLPLQC	Homo sapiens
1852	160312	Sphingolipid Receptor Edg5	O95136	1020	QEHYNYTKETLETQET	Homo sapiens
1853	160312	Sphingolipid Receptor Edg5	O95136	1021	GRRRVGTPGHLLPLR	Homo sapiens
1854	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1922	MMRKKAKFSURENPVEETKG	Homo sapiens
1855	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1923	MMIEYSNFEKEYDDVTIKM	Homo sapiens
1856	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1924	CEQTEEEKKLRHLALFRSE	Homo sapiens
1857	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1925	KKRVGDGSLVLRTHGKEMSK	Homo sapiens
1858	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	463	DRARRERFIMNEKWDTNSSSE	Homo sapiens
1859	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	464	RKNQEQWHVVSRKKQKLIK	Homo sapiens
1860	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	465	RKSAEKPQQELVMEELKE	Homo sapiens
1861	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	500	RQSAGDRRRRLGLSRQTAK	Homo sapiens
1862	160324	G Protein-Coupled Receptor	NP_076403.1	1619	DRFLKIIRPLRNIFLKKP	Homo sapiens
1863	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1620	MILSNKEATPSSVKKC	Homo sapiens
1864	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1622	VYDSYRKS KSKDRKNN	Homo sapiens
1865	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1623	ARVPYTHSQTNINKTDC	Homo sapiens

1866	160324	G Protein-Coupled Receptor	NP_076403.1	1624	CMQGRKTTASSQENHSSQTD	Homo sapiens
1867	160329	GPR86/GPR94/P2Y13 Proteinase-Activated Receptor 4	O76067	1308	CANDSDTLELPDSSRA	Homo sapiens
1868	160329	Proteinase-Activated Receptor 4	O76067	1309	PLRARALRGRRILALGLC	Homo sapiens
1869	160329	Proteinase-Activated Receptor 4	O76067	1310	LQRQTFRLARSDRVLC	Homo sapiens
1870	160329	Proteinase-Activated Receptor 4	O76067	1311	RDKVRAGLFQIRSPGDT	Homo sapiens
1871	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1213	CELRDLQLLSQFLKHPQK	Homo sapiens
1872	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1214	TSVRFMGDMVSEEDR	Homo sapiens
1873	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1215	RQEESEQSEIMEYSVLLP	Homo sapiens
1874	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1216	RTLFQRTKGRSGAEKR	Homo sapiens
1875	160387	Glucagon-Like Peptide 2 Receptor	O95838	1312	GSLLKETTRKWAQYKQAC	Homo sapiens
1876	160387	Glucagon-Like Peptide 2 Receptor	O95838	1313	QTENATDIWQDDSEC	Homo sapiens
1877	160387	Glucagon-Like Peptide 2 Receptor	O95838	1315	CPKKLSEGDGAEKLRK	Homo sapiens
1878	160387	Glucagon-Like Peptide 2 Receptor	O95838	1316	QQDHARWPRGSSLSEC	Homo sapiens
1879	160388	Latrophilin-1	O94910	1121	EPTITHESEHQSGAWC	Homo sapiens
1880	160388	Latrophilin-1	O94910	1126	CEPREVRRVQWPATQQ	Homo sapiens
1881	160388	Latrophilin-1	O94910	1129	RSQDFPPGDGGPEPPR	Homo sapiens
1882	160388	Latrophilin-1	O94910	1131	CTAEDGATSRPLSSPPGRDS	Homo sapiens
1883	160388	Latrophilin-1	O94910	1706	RESAGKNYNKMHKRETC	Homo sapiens
1884	160388	Latrophilin-1	O94910	1707	RDSPSYDPDSSPEGPSEALP	Homo sapiens
1885	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1938	QVGPCRSLSRGRGSSGAC	Homo sapiens
1886	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1939	CRDAGTELIGHLVPHHDGLR	Homo sapiens

1887	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1940	CKLAQAPGLRAGERSPEESL	Homo sapiens
1888	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1942	RVSDTPEGVNSLDPSHGES	Homo sapiens
1889	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1943	RSQKSQPSYIPFLREES	Homo sapiens
1890	160397	Latrophilin-2	O95490	1132	CEALDSKGIKWPQTQR	Homo sapiens
1891	160397	Latrophilin-2	O95490	1133	DILDAGLQELKPSEKD	Homo sapiens
1892	160397	Latrophilin-2	O95490	1136	RTHSLLYQPQKKVKSE	Homo sapiens
1893	160397	Latrophilin-2	O95490	1137	RDSPYPESPDMEEEL	Homo sapiens
1894	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1630	CQEQKMLRTLDLSYNNIRD	Homo sapiens
1895	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1631	CDSYANLNTEDNSLQD	Homo sapiens
1896	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1632	KGTAADAANVTSTLENEE	Homo sapiens
1897	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1633	ERSLSAKDIMKNGKSNHLK	Homo sapiens
1898	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1634	CNLEKEDLSENSQSSMIK	Homo sapiens
1899	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1635	KRRVTIKSGSVSVSIS	Homo sapiens
1900	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1636	CGTQSAHSDYADEEDS	Homo sapiens
1901	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1637	DEEDSFVSDSSDQVQAC	Homo sapiens
1902	160435	LS160435 Receptor	LR80	1918	ATILKLLRTEEAHGREQRR	Homo sapiens
1903	160435	LS160435 Receptor	LR80	1919	CRRVPRDITDTRRESLSAR	Homo sapiens
1904	160435	LS160435 Receptor	LR80	1920	PLSSKRWRRRRYAVAAC	Homo sapiens
1905	160435	LS160435 Receptor	LR80	1921	CRRMGPRSPSVIFMINL	Homo sapiens
1906	160889	Platelet Activating Receptor Homolog (H963)	O14626	1223	MMIPIKDIKEKSNVGC	Homo sapiens
1907	160889	Platelet Activating Receptor Homolog (H963)	O14626	1224	CLVIRQLYRNKDNENYP	Homo sapiens
1908	160889	Platelet Activating Receptor	O14626	1225	CSTRISLFKAKEATLL	Homo sapiens

1909	160889	Homolog (H963)	Platelet Activating Receptor	O14626	1226	ETFA SPKETKAQKEKLR	Homo sapiens
1910	161024	Homolog (H963)	Protein A	NP_062832.1	1690	ESRAVGLPLGLSAGRRC	Homo sapiens
1911	161024		Protein A	NP_062832.1	1691	EDARGKRSSLDGSESAK	Homo sapiens
1912	161024		Protein A	NP_062832.1	1692	RTVWEQCVAIMSEEDGD	Homo sapiens
1913	161024		Protein A	NP_062832.1	1693	CKVRFDANGATGPGSRD	Homo sapiens
1914	161024		Protein A	NP_062832.1	1694	RRLSHDENIFSTPRE	Homo sapiens
1915	161024		Protein A	NP_062832.1	1695	GGPEYLGQRRHLEDEED	Homo sapiens
1916	161024		Protein A	NP_062832.1	1696	REEITFIDETPLSP	Homo sapiens
1917	161024		Protein A	NP_062832.1	1697	RRPRPLGLSPRRLSGSPE	Homo sapiens
1918	161214		Galanin Receptor GalR3	AAC35944.1	202	RYGALELCVPAWEDARR	Homo sapiens
1919	161214		Galanin Receptor GalR3	AAC35944.1	203	GAAAAEARRRATGRAGR	Homo sapiens
1920	161214		Galanin Receptor GalR3	AAC35944.1	204	ASRHFRRFRRLWPC	Homo sapiens
1921	161214		Galanin Receptor GalR3	AAC35944.1	205	RARRALRRVRPASSGPP	Homo sapiens
1922	161221		Urotensin-II Receptor (GPR14)	LR15	371	ERYAAVLRPLDTVQRPKG	Homo sapiens
1923	161221		Urotensin-II Receptor (GPR14)	LR15	372	RAYRRQRASFRRRPGAR	Homo sapiens
1924	161221		Urotensin-II Receptor (GPR14)	LR15	373	RNYRDHLRGRVRGPGSG	Homo sapiens
1925	161221		Urotensin-II Receptor (GPR14)	LR15	374	RARFQRCSGRSLSCSPQPTD	Homo sapiens
1926	161249		G Protein-Coupled Receptor GPR66	LR20	394	ARGHFDPELNLITDEALRLK	Homo sapiens
1927	161249		G Protein-Coupled Receptor GPR66	LR20	395	IGLRRLRRERLLMQEAKGRG	Homo sapiens
1928	161249		G Protein-Coupled Receptor GPR66	LR20	396	RGSAAARSRYTCRLQQH	Homo sapiens
1929	161249		G Protein-Coupled Receptor GPR66	LR20	397	ALCLGACCHRLRPRHSS	Homo sapiens
1930	161251		Purinergic Receptor P2Y10	O00398	859	CFFLLKPFRRARDWKRRYD	Homo sapiens
1931	161251		Purinergic Receptor P2Y10	O00398	860	PFPIRLSTDNLNNKSC	Homo sapiens
1932	161251		Purinergic Receptor P2Y10	O00398	862	QLSRHGSSVTRSLMSKE	Homo sapiens
1933	161251		Purinergic Receptor P2Y10	O00398	863	LRQPPMAFGQISERQK	Homo sapiens
1934	161293		G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1672	YYDDLDDVDYEEAPC	Equine herpesvirus 2

1935	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1674	CDPYPEMSTNVWRRRAHVAK	Equine herpesvirus 2
1936	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1675	CYVVIIRILLRRPSKK	Equine herpesvirus 2
1937	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1676	CKYIPFLSGDGEKKEGPT	Equine herpesvirus 2
1938	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1820	RNLITSSAPTASPPAPS	Homo sapiens
1939	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1821	PSWTPSPRPGPAHPFLQPP	Homo sapiens
1940	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1822	RSSHQKRGTRDVGSNVC	Homo sapiens
1941	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1823	KSTSTTASFVSSSHMSVEE	Homo sapiens
1942	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1317	TSSPFLMAKPQKDEKNNTKC	Homo sapiens
1943	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1318	KKSMKKNNLSSHKKAIG	Homo sapiens
1944	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1319	QRTIHLHFLHNETKPC	Homo sapiens
1945	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1320	RKHLSSTVYVPRKKASLPE	Homo sapiens
1946	177191	Histamine H3 Receptor	Q9Y5N1	474	RAVSYRAQQGDTRRAVRK	Homo sapiens
1947	177191	Histamine H3 Receptor	Q9Y5N1	475	QRRTRLRDGAREAAGPE	Homo sapiens
1948	177191	Histamine H3 Receptor	Q9Y5N1	476	QSFTQRFRLSRDRKVA	Homo sapiens
1949	177191	Histamine H3 Receptor	Q9Y5N1	477	RYGVGEAAVGAEGEATLG	Homo sapiens
1950	177191	Histamine H3 Receptor	Q9Y5N1	1477	SSRGTERPSLRGSKPSAS	Homo sapiens
1951	177191	Histamine H3 Receptor	Q9Y5N1	1479	KPSASSASLEKRMKMVS	Homo sapiens
1952	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2052	RTLFSFYFRDTPRANR	Homo sapiens
1953	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2053	RPEMSRGLLAVRGAFV	Homo sapiens
1954	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2059	CAVLSHRRRAQPWALLV	Homo sapiens
1955	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2733	RVLVSDSLFVICALSL	Homo sapiens

1956	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1014	KRKTNVLSPHTSGSIS	Homo sapiens
1957	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1015	CFSQENPERRPSRIPST	Homo sapiens
1958	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1016	SYKDEDMYGTMKKMIC	Homo sapiens
1959	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1017	VERHMSIMRMIRVHSN	Homo sapiens
1960	189873	G Protein-Coupled Receptor GPR78	LR37	443	CQRMDVTVMKALALLAD	Homo sapiens
1961	189873	G Protein-Coupled Receptor GPR78	LR37	528	CSURLPPEPERPFAAFTAT	Homo sapiens
1962	189873	G Protein-Coupled Receptor GPR78	LR37	533	RGPLPPGICAHSAQGA LR	Homo sapiens
1963	189873	G Protein-Coupled Receptor GPR78	LR37	534	CRQAQARDLGAPWAVGLRSL	Homo sapiens
1964	189874	Neuromedin U Receptor 2	LR28	420	QQKLEDPFQKHLNSTEE	Homo sapiens
1965	189874	Neuromedin U Receptor 2	LR28	422	KDKSLEADEGNANIQRPC	Homo sapiens
1966	189874	Neuromedin U Receptor 2	LR28	423	SQHDPLPPAQRNIFLTC	Homo sapiens
1967	189874	Neuromedin U Receptor 2	LR28	487	ILHPFRAKLQSTRIRALR	Homo sapiens
1968	189884	G Protein-Coupled Receptor Ls189884	LR27	415	CKKRGTKTNLRNQIRSK	Homo sapiens
1969	189884	G Protein-Coupled Receptor Ls189884	LR27	418	EKPSSPSSGKGKTEKAE	Homo sapiens
1970	189884	G Protein-Coupled Receptor Ls189884	LR27	419	PSVQDNDPIPWEHEDQETGE	Homo sapiens
1971	189884	G Protein-Coupled Receptor Ls189884	LR27	486	KKPPTVSESQETPAGNSEG	Homo sapiens
1972	189884	G Protein-Coupled Receptor Ls189884	LR27	1832	LVMSEEFREGLGKGVWK	Homo sapiens
1973	189884	G Protein-Coupled Receptor Ls189884	LR27	1833	GLPDKVPSPEPASISPEK	Homo sapiens
1974	189884	G Protein-Coupled Receptor Ls189884	LR27	1834	PDVEQFWHERDTPVPSVQ	Homo sapiens
1975	189884	G Protein-Coupled Receptor Ls189884	LR27	1835	RHHEGVEMCLVDVPAVAEE	Homo sapiens
1976	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1685	RVPQTGPGSTASGVPE	Homo sapiens
1977	189895	G Protein-Coupled	AAK12637.1	1686	ETPRQRSESLSRSTMVTS	Homo sapiens



1978	189895	Receptor GPR61 G Protein-Coupled Receptor GPR61	AAK12637.1	1687	SSGAPQTPHRTFGGK	Homo sapiens
1979	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1688	KPAPEEELRLPSREGSIEE	Homo sapiens
1980	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1689	CPSESWVSRPLSPKQE	Homo sapiens
1981	189900	Sphingolipid Receptor Edg8	LR1	312	TGKLRGARYQPGAGLRAD	Homo sapiens
1982	189900	Sphingolipid Receptor Edg8	LR1	316	ALERSLTMARRGAPVSS	Homo sapiens
1983	189900	Sphingolipid Receptor Edg8	LR1	317	DGSFSGSERSSPQRDGLD	Homo sapiens
1984	189900	Sphingolipid Receptor Edg8	LR1	318	CGRDPGSGQSASAAEASG	Homo sapiens
1985	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2266	ASRKAEAGIKLVQGEVS	Homo sapiens
1986	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP000000071589	2270	SCLSYRVGTKPSASLR	Homo sapiens
1987	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP000000071589	2271	RVDYLLHETWRFGAAAC	Homo sapiens
1988	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP000000071589	2272	HQSRALLGLTRGRQGPVSD	Homo sapiens
1989	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP000000071589	2273	CIHTRPWTNTVFLVSL	Homo sapiens
1990	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP000000071589	2274	RGRQGPVSDSSVQPSR	Homo sapiens
1991	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2108	IDRYLIKYPFHEHLLQKKE	Homo sapiens
1992	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2109	TDNGTTCNDFASSGDPN	Homo sapiens
1993	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2110	FLKQRNRQVATALPLE	Homo sapiens
1994	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2111	RNVRIASRLGSKWKQYQC	Homo sapiens
1995	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2112	GDHFRDMLMNLRLHNFKS	Homo sapiens

1996	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1721	CVAFLAVGNPDQLIPSR	Homo sapiens
1997	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1722	NTLRHNAIRHSYPEGIC	Homo sapiens
1998	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1723	QASKLGLMSLQRPFQMSID	Homo sapiens
1999	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1724	DMMPKSFKFLPQLPGHTKRR	Homo sapiens
2000	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1715	QNLKDPVQIKIKHIRTQE	Homo sapiens
2001	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1716	KNKSGGWNTSGCVAHRD	Homo sapiens
2002	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1717	RNNNEVYGKESYGKEKGDE	Homo sapiens
2003	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1718	CGRNGKRSNRTLREEVLR	Homo sapiens
2004	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1719	TSKSKSSSTTYFKRNSHTD	Homo sapiens
2005	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1720	DKSLKLAHADGDQTS	Homo sapiens
2006	190026	G Protein-Coupled Receptor JEG18	LR24	407	LFPLRTSDDTPGNRTKC	Homo sapiens
2007	190026	G Protein-Coupled Receptor JEG18	LR24	408	QDKYPMAQDLGEKQKALK	Homo sapiens
2008	190026	G Protein-Coupled Receptor JEG18	LR24	409	SFPLDFLVKSNEIKSC	Homo sapiens
2009	190026	G Protein-Coupled Receptor JEG18	LR24	410	RRRLSRQDLHDSIQLHAK	Homo sapiens
2010	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1725	KGEAKLDSRAKDVLTIQE	Homo sapiens
2011	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1727	DHKEQPIVTENAERQLVVKD	Homo sapiens
2012	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1728	EDFEEQTLTFLDGERERK	Homo sapiens
2013	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1729	EGKEGDYIRIPERLLDVQD	Homo sapiens

2014	190168	Receptor VLGR1	AAF27278.1	324	SEAYADGIEGYDILVACSSS	Homo sapiens
2015	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	326	NNLRENNQNNQVKKDKKA	Homo sapiens
2016	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	379	DPFLNFSTPVVLFDAIT	Homo sapiens
2017	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	380	GKIFSCFHNTILCMQKE	Homo sapiens
2018	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	327	CPKFVNKILSSHQPLFS	Homo sapiens
2019	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	328	KQHARVISHVPENTKGAVKK	Homo sapiens
2020	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	329	ENTKGAVKKHLSKKDKRA	Homo sapiens
2021	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	330	CKFHTSFDMMMLRLTSI	Homo sapiens
2022	190188	G Protein-Coupled Receptor LGR6	LR36	439	ENHDQDLDLQLEMEDSKP	Homo sapiens
2023	190188	G Protein-Coupled Receptor LGR6	LR36	440	NPHFRDDLRLRPRAGDS	Homo sapiens
2024	190188	G Protein-Coupled Receptor LGR6	LR36	442	EDLHLDDESSKRPLGLLAR	Homo sapiens
2025	190188	G Protein-Coupled Receptor LGR6	LR36	621	DSGPLAYAAAGELEKSSC	Homo sapiens
2026	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1836	CAARRQHALLYNVKRSLE	Homo sapiens
2027	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1837	DGSLKAKEGSTGTSESSV	Homo sapiens
2028	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1838	CSIDLGEDGMEFGEDDIN	Homo sapiens
2029	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1839	SEDDVEAVNIPESLPPS	Homo sapiens
2030	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1840	MHKTIKKEIQDMLKKFFC	Homo sapiens
2031	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1841	KEDSHPDLPGTGGTEG	Homo sapiens
2032	190418	Inflammation-Related G Protein-Coupled Receptor	LR8	343	RQVKRAAQAALDQYKLRQAS	Homo sapiens

2033	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	344	RTDEAMPGRFQELDSRLASG	Homo sapiens
2034	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	345	DSSEVGDGINSKRAKQMAEK	Homo sapiens
2035	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	346	KAQPIKGARRAPDSSEFGK	Homo sapiens
2036	190419	EX33 G Protein-Coupled Receptor Ls190419	CAC33085.1	2716	RRKSNFRLRGYSTGKT	Homo sapiens
2037	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2717	RRQKSSYNYLLALAAAD	Homo sapiens
2038	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2719	CFLTIPYVWWPNWT	Homo sapiens
2039	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2725	CSIFFILNSIIVYKLR	Homo sapiens
2040	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2754	GRUYSLLSFISIPH	Homo sapiens
2041	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2755	FFLFLWIHVVDRE	Homo sapiens
2042	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2756	MDPTISTLDTLTP	Homo sapiens
2043	190427	Cysteinyln Leukotriene CYSLT2 Receptor	LR49	471	ASSIMLLDSGSEQNGSVTSC	Homo sapiens
2044	190427	Cysteinyln Leukotriene CYSLT2 Receptor	LR49	472	RVLLKVEVPESGLRVSHRK	Homo sapiens
2045	190427	Cysteinyln Leukotriene CYSLT2 Receptor	LR49	473	KDRLKSALRKGHQPQKATKC	Homo sapiens
2046	190427	Cysteinyln Leukotriene CYSLT2 Receptor	LR49	512	MEPNGTFSNNNSRNC	Homo sapiens
2047	190427	Cysteinyln Leukotriene CYSLT2 Receptor	NP_065110.1	2253	CTIENFKREFFPVYLIF	Homo sapiens
2048	190427	Cysteinyln Leukotriene CYSLT2 Receptor	NP_065110.1	2254	GVLGNGLSIYVFLQPYK	Homo sapiens
2049	190427	Cysteinyln Leukotriene CYSLT2 Receptor	NP_065110.1	2255	ADYYLRGSNWIFGDLAC	Homo sapiens
2050	190427	Cysteinyln Leukotriene CYSLT2 Receptor	NP_065110.1	2256	FRLLHVTIRSASWILC	Homo sapiens

2051	190427	Receptor Cysteinyi Leukotriene CysLT2	NP_065110.1	2257	CGIIWILIMASSIMLLDSGS	Homo sapiens
2052	190427	Receptor Cysteinyi Leukotriene CysLT2	NP_065110.1	2258	CLELNLYKIAKLQTMNYIAL	Homo sapiens
2053	190427	Receptor Cysteinyi Leukotriene CysLT2	NP_065110.1	2260	VSHRKALTTIITLIIFLC	Homo sapiens
2054	190427	Receptor Cysteinyi Leukotriene CysLT2	NP_065110.1	2261	CFLPYHTLRTVHLTWKVG	Homo sapiens
2055	190427	Receptor Cysteinyi Leukotriene CysLT2	NP_065110.1	2262	CKDRLHKALVITLALA	Homo sapiens
2056	190427	Receptor Cysteinyi Leukotriene CysLT2	NP_065110.1	2263	YFAGENFKDRLKSALRKG	Homo sapiens
2057	190427	Receptor Cysteinyi Leukotriene CysLT2	NP_065110.1	2264	HPQKAKTKCVFPVSWLRKE	Homo sapiens
2058	190437	Receptor G Protein-Coupled Receptor C5L2	LR31	429	DSVSYEYGDYSDLSDRPVDC	Homo sapiens
2059	190437	Receptor G Protein-Coupled Receptor C5L2	LR31	430	RESQGGQDESVDKKSTSHD	Homo sapiens
2060	190437	Receptor G Protein-Coupled Receptor C5L2	LR31	431	PSAIYRRLHQEHFARLQC	Homo sapiens
2061	190437	Receptor G Protein-Coupled Receptor C5L2	LR31	432	CHWALRESQGGQDESVDSSKKS	Homo sapiens
2062	190437	Receptor G Protein-Coupled Receptor C5L2	NP_060955.1	2818	MGNDVSVSYEYGDYSDLSDRPVDC	Homo sapiens
2063	190438	Receptor G Protein-Coupled Receptor Ls190438	ENSP00000080322	2585	TERLKIRWHTSDNQVRPQAC	Homo sapiens
2064	190484	Receptor G Protein-Coupled Receptor Ls190484	LR33	434	EADLGATGHRPRTELDDED	Homo sapiens
2065	190484	Receptor G Protein-Coupled Receptor Ls190484	LR33	435	RTCHRQQQPAAACRGFARVAR	Homo sapiens
2066	190484	Receptor G Protein-Coupled Receptor Ls190484	LR33	436	EERPGSFPTPEPQTQLDSEG	Homo sapiens
2067	190484	Receptor G Protein-Coupled Receptor Ls190484	LR33	437	RSDPTAQPLNPTAQPGSD	Homo sapiens
2068	190595	Receptor G Protein-Coupled Receptor SH120	NP_057418.1	1730	RNVTDITDILALERLLQ	Homo sapiens
2069	190595	Receptor G Protein-Coupled Receptor SH120	NP_057418.1	1731	KKKRMAMARRTMFQKGE	Homo sapiens

2070	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1732	KSVTTSASGSENLTJQQE	Homo sapiens
2071	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1733	EVDALEELSRQLFLETAD	Homo sapiens
2072	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1734	DRVGKTDPVTRGIEIT	Homo sapiens
2073	190599	G Protein-Coupled Receptor GPRC5B	O75205	411	VRLPFIKEKEKKSPVGLH	Homo sapiens
2074	190599	G Protein-Coupled Receptor GPRC5B	O75205	412	DEHNAALRTAGFPNGSLGKR	Homo sapiens
2075	190599	G Protein-Coupled Receptor GPRC5B	O75205	413	GKRPSGSLGKRPSAPFRSNV	Homo sapiens
2076	190599	G Protein-Coupled Receptor GPRC5B	O75205	414	SQPRMRETAFEEDVQLPR	Homo sapiens
2077	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	542	GDPAIYQSLKAGNAYSRLHC	Homo sapiens
2078	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	543	PFSHSSYTVRSKKIFLSKL	Homo sapiens
2079	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	619	GKILLNLTGMRRKNTCQN	Homo sapiens
2080	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	620	EEVTLVQAIRITSYME	Homo sapiens
2081	190623	Melanopsin	AAF24978.1	2137	CKNGESLWQRQLQSE	Homo sapiens
2082	190623	Melanopsin	AAF24978.1	2138	RHSRPYSYRSTHIRST	Homo sapiens
2083	190623	Melanopsin	AAF24978.1	2139	TSHTSNLSWISIRRRQE	Homo sapiens
2084	190623	Melanopsin	AAF24978.1	2140	DLEAKAPRPQGHEAET	Homo sapiens
2085	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1735	KLQRRPVAVDVLLNLTASD	Homo sapiens
2086	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1736	KTRPRLGQAGLVSVAC	Homo sapiens
2087	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1737	EFSGDISHSQGTNGTC	Homo sapiens
2088	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1738	SRLVWILGRGGSHRRQRR	Homo sapiens
2089	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1739	GQWQQQESSMELKEQKGG	Homo sapiens
2090	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1740	EEQRADRPAAERKTSEHSQGC	Homo sapiens
2091	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	2569	MDTGPDQSYFSGNHWFVFSV	Homo sapiens

2092	190701	Receptor GPR41 & GPR42 C-C Chemokine Receptor 11	AAF61299.1	1441	VAIYAYKKQRTKTDV	Homo sapiens
2093	190701	C-C Chemokine Receptor 11	AAF61299.1	1442	VAVTKVPSQSGVGKPCWII	Homo sapiens
2094	190701	C-C Chemokine Receptor 11	AAF61299.1	1443	CNMSKRMIDIAIQVTESI	Homo sapiens
2095	190701	C-C Chemokine Receptor 11	AAF61299.1	1444	RQSVVEFPDSEGPTEP	Homo sapiens
2096	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1741	GHPPGSGGAESADTEARVR	Homo sapiens
2097	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1742	HSVASALKSHRTRGHGRGDC	Homo sapiens
2098	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1743	KGGAAVAGGRPTGASARR	Homo sapiens
2099	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1744	CLVRREFRKALKSLLWR	Homo sapiens
2100	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1745	RPFTATTKPEHEDQGLQ	Homo sapiens
2101	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	339	AFPPVLDVGTYSFIREEDQC	Homo sapiens
2102	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	340	HDRRKMKPVQFVAAVSQN	Homo sapiens
2103	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	341	RRRLVLDEFKMEKRISR	Homo sapiens
2104	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	342	LRRCFSTLLYCRKSRLPRE	Homo sapiens
2105	190725	G Protein-Coupled Receptor GPR26	LR26	554	PLTLAGVVARROPAGDRLC	Homo sapiens
2106	190725	G Protein-Coupled Receptor GPR26	LR26	555	CSRRPDERLRFVFTGA	Homo sapiens
2107	190725	G Protein-Coupled Receptor GPR26	LR26	557	CKEILNRLHRRSIHSSG	Homo sapiens
2108	190725	G Protein-Coupled Receptor GPR26	LR26	567	CLEEQKRRRQRATKKIST	Homo sapiens
2109	190741	Sreb3	LR9	516	EPEEVSGALSPPSASAVVK	Homo sapiens
2110	190741	Sreb3	LR9	519	NGHAASRRLLGMDEVKGEK	Homo sapiens
2111	190741	Sreb3	LR9	526	KKCLRTHAPCWGTGGAPAPR	Homo sapiens
2112	190741	Sreb3	LR9	527	VLMAATHAVVGKLLFEYR	Homo sapiens

2113	190742	G Protein-Coupled Receptor H7BA62	LR23	550	RRAPGPPSDTFVFNILAD	Homo sapiens
2114	190742	G Protein-Coupled Receptor H7BA62	LR23	551	QRRQRRRQDSRVVARSVR	Homo sapiens
2115	190742	G Protein-Coupled Receptor H7BA62	LR23	552	RREPRQALAGTFRDLSR	Homo sapiens
2116	190742	G Protein-Coupled Receptor H7BA62	LR23	553	KQVGRRWVASNPRESRPS	Homo sapiens
2117	190743	G Protein-Coupled Receptor GPRC5D	LR32	568	KDCIESTG DYFLLCDAEGP	Homo sapiens
2118	190743	G Protein-Coupled Receptor GPRC5D	LR32	569	VENQELSRGTFLGDSGR	Homo sapiens
2119	190743	G Protein-Coupled Receptor GPRC5D	LR32	570	GDSGSREVLLEKEKQKNHA	Homo sapiens
2120	190743	G Protein-Coupled Receptor GPRC5D	LR32	571	SMLLRGNPQFQRQPQWDDP	Homo sapiens
2121	190744	G Protein-Coupled Receptor GPRC5C	LR34	529	KVPSEELTSSSHGPPPTAR	Homo sapiens
2122	190744	G Protein-Coupled Receptor GPRC5C	LR34	532	RSGEGGPGQGNSSAGWAV	Homo sapiens
2123	190744	G Protein-Coupled Receptor GPRC5C	LR34	535	QDTKKRSLLTGTQVFLLGT	Homo sapiens
2124	190744	G Protein-Coupled Receptor GPRC5C	LR34	538	KEQKGQSMFVENKAFSMD E	Homo sapiens
2125	190745	G Protein-Coupled Receptor LGR7	LR40	560	TATEIRNQVKKEMILAKR	Homo sapiens
2126	190745	G Protein-Coupled Receptor LGR7	LR40	561	NYRQRKSMDSKGQKTYAPS	Homo sapiens
2127	190745	G Protein-Coupled Receptor LGR7	LR40	565	SCSNLTVLVMIRKNKINHLN	Homo sapiens
2128	190745	G Protein-Coupled Receptor LGR7	LR40	566	DELDLGSNKIENLPPLFKD	Homo sapiens
2129	190748	GPCR Ls190748	LR47	546	QLSSPSRPTQKTLCSLR	Homo sapiens
2130	190748	GPCR Ls190748	LR47	547	DMLKIASMHSGQIRKMEHAG	Homo sapiens
2131	190748	GPCR Ls190748	LR47	548	AGGYRSPRTPSDFKALRTVS	Homo sapiens
2132	190748	GPCR Ls190748	LR47	549	RESSCHIVTISSEFDG	Homo sapiens
2133	190748	GPCR Ls190748	LR47	1481	GVKKVLTSLFLSARNC	Homo sapiens
2134	190748	GPCR Ls190748	LR47	1482	NSLLNPLUYAVWQKEVRLQ	Homo sapiens
2135	190749	G Protein-Coupled	LR48	467	RRAALRP RPARGSR LRS D	Homo sapiens



2136	190749	Receptor GPR62	LR48	468	RPVRLALGRLRRALPGPVR	Homo sapiens
2137	190749	G Protein-Coupled Receptor GPR62	LR48	510	DSRLSILPPLRPLPGGK	Homo sapiens
2138	190749	G Protein-Coupled Receptor GPR62	LR48	511	RPPEGPAVGPSEAPEQTPE	Homo sapiens
2139	190749	G Protein-Coupled Receptor GPR62	LR48	2702	VVARRAALRPPRPA	Homo sapiens
2140	190749	G Protein-Coupled Receptor GPR62	LR48	2703	PSEAPEQTPELAGGR	Homo sapiens
2141	190749	G Protein-Coupled Receptor GPR62	LR48	2704	GPSEAPEQTPELAG	Homo sapiens
2142	190774	Histamine H4 Receptor	NP_067637.2	2235	PDNSTINLSLSTRVTLAFL	Homo sapiens
2143	190774	Histamine H4 Receptor	NP_067637.2	2237	VVDKNILRHRSSYFFLN	Homo sapiens
2144	190774	Histamine H4 Receptor	NP_067637.2	2240	LYPHTLFEWDFGKEIC	Homo sapiens
2145	190774	Histamine H4 Receptor	NP_067637.2	2242	TQHTGVLKIVTLMVAV	Homo sapiens
2146	190774	Histamine H4 Receptor	NP_067637.2	2243	VNGPMILVSESWKDEGSEC	Homo sapiens
2147	190774	Histamine H4 Receptor	NP_067637.2	2244	CEPGFSEWYLAITSFL	Homo sapiens
2148	190774	Histamine H4 Receptor	NP_067637.2	2245	AVFNMINIYWLSLWKRDHLRRC	Homo sapiens
2149	190774	Histamine H4 Receptor	NP_067637.2	2246	CGHSFRGRLSSRRSL	Homo sapiens
2150	190774	Histamine H4 Receptor	NP_067637.2	2247	IASKMGFSQSDSVATHQRE	Homo sapiens
2151	190774	Histamine H4 Receptor	NP_067637.2	2249	IVLSFYSSATGPKSVWYRIA	Homo sapiens
2152	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2085	IIRVTVPGKITGTVAC	Homo sapiens
2153	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2086	SPWTNDPKERINVAVA	Homo sapiens
2154	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2087	RIRELLQGMYKEIGIAVD	Homo sapiens
2155	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2088	TQTSDTATNSTLPSAE	Homo sapiens
2156	190824	Formyl Peptide Receptor-like 2 (FPRL2)	LR14	481	TEVPDSAQTSTNHTTSAS	Homo sapiens
2157	190824	Formyl Peptide Receptor-like 2 (FPRL2)	LR14	522	GDTAVERLNVFITMAKV	Homo sapiens
2158	190824	Formyl Peptide Receptor-like 2 (FPRL2)	LR14	523	MSLAKRVMTGLWIFTI	Homo sapiens
2159	190824	Formyl Peptide Receptor	LR14	525	LHFHIGFTVPMISITV	Homo sapiens

2160	190948	like 2 (FPR2)	NP_038475.1	1658	DELLEAPGDLETLRLQQHC	Homo sapiens
2161	190948	EMR2 Hormone Receptor	NP_038475.1	1659	CVASHLLDGLDVLRLGSKN	Homo sapiens
2162	190948	EMR2 Hormone Receptor	NP_038475.1	1660	KSGDPGPSVVGVSIPG	Homo sapiens
2163	190948	EMR2 Hormone Receptor	NP_038475.1	1661	SKGIRKLKTESEMHTLSS	Homo sapiens
2164	190948	EMR2 Hormone Receptor	NP_038475.1	1662	ELSLEVQKQVDRSVTLRQNG	Homo sapiens
2165	190948	EMR2 Hormone Receptor	NP_038475.1	1663	EPEKQMLLHETHQGLLDGGS	Homo sapiens
2166	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1492	KRMQKRSVTALMVNLALAD	Homo sapiens
2167	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1493	RPFVSQKLRITKAMARR	Homo sapiens
2168	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1494	ASYSDIGRRRLQARRFR	Homo sapiens
2169	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1495	LEGTGSEASSTRRGGG	Homo sapiens
2170	191039	Trace Amine Receptor 1 (TA1)	LR122	2039	RKALKMMLFGKIFQKDSRC	Homo sapiens
2171	191039	Trace Amine Receptor 1 (TA1)	LR122	2040	QIGLEMKNGISQSKERKAV	Homo sapiens
2172	191039	Trace Amine Receptor 1 (TA1)	LR122	2041	RIYLAKQEARLSDANQK	Homo sapiens
2173	191039	Trace Amine Receptor 1 (TA1)	LR122	2042	ELNFKGAEIYKHHVHC	Homo sapiens
2174	191039	Trace Amine Receptor 1 (TA1)	LR122	2043	CVKNNWSNDVRASLYS	Homo sapiens
2175	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1569	SAEPPADWDGAGGSYRLRG	Homo sapiens
2176	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1571	GIVRRVRVSVKRVSVLN	Homo sapiens
2177	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1572	RNEEFRRSVRSVLPVGDA	Homo sapiens
2178	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1573	CEEEESWAGRRIPVSLYSG	Homo sapiens
2179	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1651	CYLGIVRRVRVSVKRV	Homo sapiens
2180	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1544	KELYRSVVRTRGVGKVP	Homo sapiens
2181	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1545	ILTNRQPRDKNVKKCS	Homo sapiens

2182	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1546	CPNSATSLSQDNIRKKEQDGG	Homo sapiens
2183	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1570	TTRPFKTSNPKNILLGAK	Homo sapiens
2184	191193	Trace Amine Receptor 3 (TA3)	LR88	1969	ANEEGIEELVVA	Homo sapiens
2185	191193	Trace Amine Receptor 3 (TA3)	LR88	2316	RKIESTASQAQSS	Homo sapiens
2186	191193	Trace Amine Receptor 3 (TA3)	LR88	2571	LVDAVIDAYMNF	Homo sapiens
2187	191193	Trace Amine Receptor 3 (TA3)	LR88	2573	RTDSSTTNLFSEEVET	Homo sapiens
2188	191196	G Protein-Coupled - Receptor GPR80	IP_13092	1864	NASDFPDYAAAFGNCTDE	Homo sapiens
2189	191196	G Protein-Coupled Receptor GPR80	IP_13092	1865	TLTSTNRTNRSACLD	Homo sapiens
2190	191196	G Protein-Coupled Receptor GPR80	IP_13092	1866	TLTHGLQTDSCCLKQKARR	Homo sapiens
2191	191196	G Protein-Coupled Receptor GPR80	IP_13092	1867	RLLSICSIENQIHEA	Homo sapiens
2192	191196	G Protein-Coupled Receptor GPR80	IP_13092	1868	QQAVCSTVRCKVSGNLE	Homo sapiens
2193	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2749	QDIAEVDHSEGEF	Homo sapiens
2194	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2750	RKQWRLQQPIKLKLA	Homo sapiens
2195	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2751	CSISINFPSTFTVMTC	Homo sapiens
2196	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2752	QWFLILWVKDSDV	Homo sapiens
2197	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2575	AF LSDNTIEVRINRITLKK	Homo sapiens
2198	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2576	QETKNEFRNLKQIQSKC	Homo sapiens
2199	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2577	CNNKTHWAPVRSTM	Homo sapiens
2200	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2581	TKMAEYDLQNDVFIPD	Homo sapiens
2201	193511	EGF-Like Module-Containing	AAK15076.1	1665	CQDITSSKTEGRKELQKIV	Homo sapiens

2202	193511	Mucin-Like Receptor EMR3	AAK15076.1	1666	RDVESKVLLETALKDPEQK	Homo sapiens
2203	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1667	KIQNDSVAIETQAIDNC	Homo sapiens
2204	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1668	CSEERKTFNLNVQMNSMDIR	Homo sapiens
2205	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1669	EEMDKKDDQVYVNSQVVSAA	Homo sapiens
2206	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1670	SKSVTLTFQHVKMTPTSK	Homo sapiens
2207	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2142	CLLLPTAVIVFSYVKIIAK	Homo sapiens
2208	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2144	RPDSIPIQLSVVPTLLA	Homo sapiens
2209	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2145	CQTGGGLKATKKKSLEG	Homo sapiens
2210	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2146	RLHVTIVRKSSAVLE	Homo sapiens
2211	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2620	PTAVIVFSYVKIIAKV	Homo sapiens
2212	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1947	KLAQRLREVTGHTDHYFSQD	Homo sapiens
2213	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1948	CALQITWGSERRLGIDTSKD	Homo sapiens
2214	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2734	RGRRRQSARNSRGPPEQPNE	Homo sapiens
2215	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2735	RNSRGPPPEQPNEELG	Homo sapiens
2216	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2736	AQVREDVRPHTVVLRL	Homo sapiens
2217	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2742	QLDQVPSRHPSPRE	Homo sapiens

2218	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2744	LDLSRSSNSREQLDQV	Homo sapiens
2219	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1903	REEHFMVDARNRSPLYSC	Homo sapiens
2220	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1904	PGPAPGGEEAADPRASRR	Homo sapiens
2221	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1905	CPRPSGSHKEAYSERPGGL	Homo sapiens
2222	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1906	PSSGAPRPGRLPLRNGRVA	Homo sapiens
2223	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2018	FLGKNDIDIKTKELIVN	Homo sapiens
2224	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2019	QVTYRDSKEKRDLRNFLK	Homo sapiens
2225	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2020	CERTKIWGTFKINERFTND	Homo sapiens
2226	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2021	SKYANGIEIQLKKAYER	Homo sapiens
2227	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2022	CIVVFIVRTERSLHAP	Homo sapiens
2228	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2023	KILALFWFDSREIFEAC	Homo sapiens
2229	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2024	CVHQDVMKLAYADTLP	Homo sapiens
2230	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2027	RFGNSLHPVIRVVMGD	Homo sapiens
2231	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2028	KTKQIRTRVLAMFKISC	Homo sapiens
2232	194743	FLJ14454	LR77	1855	KTDENEQDQSASVDMVFSP	Homo sapiens
2233	194743	FLJ14454	LR77	1856	KKDYQYPKSLDILSNVGC	Homo sapiens
2234	194743	FLJ14454	LR77	1857	KNLQTSDDGINNIDFDNN	Homo sapiens
2235	194743	FLJ14454	LR77	1858	SQNGNNPQWELDYRQEKIC	Homo sapiens
2236	194743	FLJ14454	LR77	1859	RPRLRVKMYNFLRSLPTLHE	Homo sapiens
2237	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1845	CNPSVPKQRVMKLTGM	Homo sapiens
2238	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1846	RLTRWRTRYKTIRINLG	Homo sapiens
2239	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1847	KDGVESCAFDLTSPDDVL	Homo sapiens
2240	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1848	LSGNFQKRLPQIGRRATE	Homo sapiens

2241	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1849	TIIRSRKKTVPDIYIC	Homo sapiens
2242	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1907	RRATEKEINNMGNTLKS HF	Homo sapiens
2243	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2089	CRIGEDTISQVMPPLLVA	Homo sapiens
2244	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2090	RRHWAFGDIPCRVGLFTL	Homo sapiens
2245	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2091	CESFIMESANGWHDIM	Homo sapiens
2246	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2092	CSFKIVWSLRRRQQLARQAR	Homo sapiens
2247	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2093	RRRQQLARQARMKKATR	Homo sapiens
2248	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2094	TVPSACDPSVHGALH	Homo sapiens
2249	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2095	CSLKPQPGHSHKTQRPEEM	Homo sapiens
2250	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2096	CISVANSFQSQSDGQWD	Homo sapiens
2251	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2034	RTRKQHSEATNSSNRV FVVC	Homo sapiens
2252	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2035	RVISQISADNYKIHGDPSA	Homo sapiens
2253	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2036	TSSARTSNAKPFHSD	Homo sapiens
2254	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2037	NGTRPGMASTKLSPWD	Homo sapiens
2255	194858	G Protein-Coupled Receptor Ls194858	LR84	1933	LGIAWDRRLRSPAGC	Homo sapiens
2256	194858	G Protein-Coupled Receptor Ls194858	LR84	1934	GERYMAVLRPLQPPGS	Homo sapiens
2257	194858	G Protein-Coupled Receptor Ls194858	LR84	1935	CRDEPSALARALTWRQAR	Homo sapiens
2258	194858	G Protein-Coupled Receptor Ls194858	LR84	1936	AAQRCLQGLWGRASRD	Homo sapiens
2259	194858	G Protein-Coupled Receptor Ls194858	LR84	1937	RDSPGPSIAYHPSSQSSVD	Homo sapiens
2260	194878	MrgX3 G Protein-Coupled	AAK91806.1	2748	ALFSRIHLDWKVLF	Homo sapiens

2261	194903	Receptor G Protein-Coupled Receptor GPCR83	ENSP00000198236	1991	CIAFKDIMPFSAGVGDER	Homo sapiens
2262	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1992	KAFFEAYARADKKAPRPC	Homo sapiens
2263	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1993	ETKIQWHGKDNQVPKSV	Homo sapiens
2264	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1994	CSYLGKDLPENYNKAK	Homo sapiens
2265	194904	WO0034334-hFB41A	LR114	2011	SDYDMPLEDEEDVTNS	Homo sapiens
2266	194904	WO0034334-hFB41A	LR114	2014	NPHGAHATSPFNFSY	Homo sapiens
2267	194905	G Protein-Coupled Receptor MGC7035	LR112	1986	ERALPRTYMASVYNTRHVC	Homo sapiens
2268	194905	G Protein-Coupled Receptor MGC7035	LR112	1987	CAKMQNAEAAADATLVF	Homo sapiens
2269	194905	G Protein-Coupled Receptor MGC7035	LR112	1988	DRDTGRLEPSAHLRLVATVC	Homo sapiens
2270	194905	G Protein-Coupled Receptor MGC7035	LR112	1989	RYMNSQSFPSKLQRLMKKLPC	Homo sapiens
2271	194907	G Protein-Coupled Receptor 14273	LR116	2003	CARAAAGDAPLRSLQANRTR	Homo sapiens
2272	194907	G Protein-Coupled Receptor 14273	LR116	2004	VISYSKILQTTKASRKRL	Homo sapiens
2273	194907	G Protein-Coupled Receptor 14273	LR116	2005	TVSLAYSRSHQIRVSQQD	Homo sapiens
2274	194907	G Protein-Coupled Receptor 14273	LR116	2006	CTWFPEKGAILTDTSVKRND	Homo sapiens
2275	194908	G Protein-coupled Receptor Gpcrb4	LR117	2007	TYGRDNGQLLGERVARRDIC	Homo sapiens
2276	194908	G Protein-coupled Receptor Gpcrb4	LR117	2008	QETLPTLQPNQNMITSEERQIR	Homo sapiens
2277	194908	G Protein-coupled Receptor Gpcrb4	LR117	2009	RTSQSYTCNQECDNCLNAT	Homo sapiens
2278	194908	G Protein-coupled Receptor Gpcrb4	LR117	2010	RPQSHPRTPDDPKITIVSC	Homo sapiens
2279	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2312	VARRQAKKIENTGSKT	Homo sapiens
2280	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2313	KVIVTGQVLKNSSA	Homo sapiens

2281	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2318	MSSNSLLVAVQLC	Homo sapiens
2282	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2307	IAKQQAIIETSSKV	Homo sapiens
2283	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2314	MTSNFSQPVWQLC	Homo sapiens
2284	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2319	KLILSGDVLKAS	Homo sapiens
2285	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2570	SGDVLKASSSTISLFL	Homo sapiens
2286	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2727	QDKPEVDKGGGQLPEESL	Homo sapiens
2287	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2728	UNISHLIRKILVS	Homo sapiens
2288	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2729	MDPTVPVFGTKL	Homo sapiens
2289	195015	G Protein-Coupled Receptor GPR82	AAL26482	2706	RYATLMQKDSSEIT	Homo sapiens
2290	195015	G Protein-Coupled Receptor GPR82	AAL26482	2707	KIFYGHLLKKFRQPNF	Homo sapiens
2291	195015	G Protein-Coupled Receptor GPR82	AAL26482	2708	YSVIEATEGEESLC	Homo sapiens
2292	195015	G Protein-Coupled Receptor GPR82	AAL26482	2715	CTSIMEKDLTYSSVKR	Homo sapiens



SEQ ID NO:	LS_ID	Gene	Antibody Company Name
1	127	5-HT1A Receptor	Chemicon
1	127	5-HT1A Receptor	Research Diagnostics
1	127	5-HT1A Receptor	Santa Cruz
3	128	5-HT1B Receptor	Chemicon
3	128	5-HT1B Receptor	Research Diagnostics
3	128	5-HT1B Receptor	Santa Cruz
5	129	5-HT1D Receptor	Research Diagnostics
5	129	5-HT1D Receptor	Santa Cruz
11	132	5-HT2A Receptor	Calbiochem
11	132	5-HT2A Receptor	Research Diagnostics
13	133	5-HT2B Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Santa Cruz
21	139	5-HT7 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Alpha Diagnostic Int.
23	272	Adenosine A1 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Santa Cruz
25	273	Adenosine A2a Receptor	Alpha Diagnostic Int.
25	273	Adenosine A2a Receptor	Calbiochem
25	273	Adenosine A2a Receptor	Chemicon
25	273	Adenosine A2a Receptor	Santa Cruz
27	274	Adenosine A2b Receptor	Alpha Diagnostic Int.
27	274	Adenosine A2b Receptor	Chemicon
27	274	Adenosine A2b Receptor	Santa Cruz
29	275	Adenosine A3 Receptor	Alpha Diagnostic Int.
29	275	Adenosine A3 Receptor	Santa Cruz
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Alpha Diagnostic Int.
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Chemicon
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Research Diagnostics
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Santa Cruz
35	377	Alpha 1b-adrenoceptor	Research Diagnostics
35	377	Alpha 1b-adrenoceptor	Santa Cruz
37	379	Alpha 1c-adrenoceptor	Research Diagnostics
37	379	Alpha 1c-adrenoceptor	Santa Cruz
39	387	Alpha 2a-adrenoceptor	Calbiochem
39	387	Alpha 2a-adrenoceptor	Santa Cruz
41	388	Alpha 2b-adrenoceptor	Research Diagnostics
41	388	Alpha 2b-adrenoceptor	Santa Cruz
43	389	Alpha 2c-adrenoceptor	Research Diagnostics
43	389	Alpha 2c-adrenoceptor	Santa Cruz
45	599	Bradykinin B1 Receptor	Research Diagnostics
49	635	Beta-1 adrenoceptor	Calbiochem
49	635	Beta-1 adrenoceptor	Research Diagnostics

49	635	Beta-1 adrenoceptor	Santa Cruz
51	640	Beta-2 adrenoceptor	Research Diagnostics
51	640	Beta-2 adrenoceptor	Santa Cruz
53	643	Beta-3 adrenoceptor	Alpha Diagnostic Int.
53	643	Beta-3 adrenoceptor	Chemicon
53	643	Beta-3 adrenoceptor	Research Diagnostics
53	643	Beta-3 adrenoceptor	Santa Cruz
57	692	Bombesin Receptor Subtype-3	Alpha Diagnostic Int.
57	692	Bombesin Receptor Subtype-3	Chemicon
59	729	CXC Chemokine Receptor 5	Research Diagnostics
59	729	CXC Chemokine Receptor 5	Santa Cruz
61	735	C-C Chemokine Receptor 1	Calbiochem
61	735	C-C Chemokine Receptor 1	Capralogics
61	735	C-C Chemokine Receptor 1	Chemicon
61	735	C-C Chemokine Receptor 1	Research Diagnostics
61	735	C-C Chemokine Receptor 1	Santa Cruz
63	737	C-C Chemokine Receptor 3	Research Diagnostics
63	737	C-C Chemokine Receptor 3	Santa Cruz
65	738	C-C Chemokine Receptor 4	Capralogics
65	738	C-C Chemokine Receptor 4	Research Diagnostics
65	738	C-C Chemokine Receptor 4	Santa Cruz
67	741	C-C Chemokine Receptor 7	Research Diagnostics
67	741	C-C Chemokine Receptor 7	Santa Cruz
69	742	C-C Chemokine Receptor 8	Chemicon
70	742	C-C Chemokine Receptor 8	Chemicon
71	742	C-C Chemokine Receptor 8	Chemicon
73	752	CXC Chemokine Receptor 3	Research Diagnostics
73	752	CXC Chemokine Receptor 3	Santa Cruz
73	752	CXC Chemokine Receptor 3	Zymed
75	753	CXC Chemokine Receptor 4	Biosource
75	753	CXC Chemokine Receptor 4	Calbiochem
75	753	CXC Chemokine Receptor 4	Capralogics
75	753	CXC Chemokine Receptor 4	Chemicon
75	753	CXC Chemokine Receptor 4	eBioscience
75	753	CXC Chemokine Receptor 4	Research Diagnostics
75	753	CXC Chemokine Receptor 4	Santa Cruz
77	755	Complement Component 3a Receptor 1	Chemokine.com
79	758	Complement Component 5a Receptor 1	Santa Cruz
83	832	Cannabinoid Receptor 1	Alpha Diagnostic Int.
83	832	Cannabinoid Receptor 1	Biosource
83	832	Cannabinoid Receptor 1	Calbiochem
83	832	Cannabinoid Receptor 1	Cayman
83	832	Cannabinoid Receptor 1	Chemicon
83	832	Cannabinoid Receptor 1	Santa Cruz
85	833	Cannabinoid Receptor 2	Alpha Diagnostic Int.
85	833	Cannabinoid Receptor 2	Calbiochem
85	833	Cannabinoid Receptor 2	Cayman
85	833	Cannabinoid Receptor 2	Chemicon
85	833	Cannabinoid Receptor 2	Santa Cruz
97	1240	Dopamine Receptor D1	Alpha Diagnostic Int.
97	1240	Dopamine Receptor D1	Biogenesis

97	1240	Dopamine Receptor D1	Calbiochem
97	1240	Dopamine Receptor D1	Chemicon
97	1240	Dopamine Receptor D1	FabGennix through Abcam
97	1240	Dopamine Receptor D1	Research Diagnostics
97	1240	Dopamine Receptor D1	Santa Cruz
99	1241	Dopamine Receptor D5	Alpha Diagnostic Int.
99	1241	Dopamine Receptor D5	Biogenesis
99	1241	Dopamine Receptor D5	Calbiochem
99	1241	Dopamine Receptor D5	Chemicon
99	1241	Dopamine Receptor D5	Santa Cruz
101	1242	Dopamine Receptor D2	Alpha Diagnostic Int.
101	1242	Dopamine Receptor D2	Biogenesis
101	1242	Dopamine Receptor D2	Calbiochem
101	1242	Dopamine Receptor D2	Chemicon
101	1242	Dopamine Receptor D2	DPC Biermann/Acris
101	1242	Dopamine Receptor D2	FabGennix through Abcam
101	1242	Dopamine Receptor D2	Research Diagnostics
101	1242	Dopamine Receptor D2	Santa Cruz
103	1243	Dopamine Receptor D3	Alpha Diagnostic Int.
103	1243	Dopamine Receptor D3	Biogenesis
103	1243	Dopamine Receptor D3	Calbiochem
103	1243	Dopamine Receptor D3	Chemicon
103	1243	Dopamine Receptor D3	Research Diagnostics
103	1243	Dopamine Receptor D3	Santa Cruz
103	1243	Dopamine Receptor D3	Zymed
105	1244	Dopamine Receptor D4	Alpha Diagnostic Int.
105	1244	Dopamine Receptor D4	Biogenesis
105	1244	Dopamine Receptor D4	Calbiochem
105	1244	Dopamine Receptor D4	Chemicon
105	1244	Dopamine Receptor D4	DPC Biermann/Acris
105	1244	Dopamine Receptor D4	Santa Cruz
107	1267	Opioid Receptor, delta 1 (OPRD1)	Biosource
107	1267	Opioid Receptor, delta 1 (OPRD1)	Calbiochem
107	1267	Opioid Receptor, delta 1 (OPRD1)	DPC Biermann/Acris
107	1267	Opioid Receptor, delta 1 (OPRD1)	Santa Cruz
113	1486	Endothelin B Receptor	Biogenesis
113	1486	Endothelin B Receptor	Capralogics
113	1486	Endothelin B Receptor	DPC Biermann/Acris
113	1486	Endothelin B Receptor	Fitzgerald Industries Int.
113	1486	Endothelin B Receptor	Research Diagnostics
115	1488	Endothelin A Receptor	Biogenesis
115	1488	Endothelin A Receptor	Capralogics
115	1488	Endothelin A Receptor	DPC Biermann/Acris
115	1488	Endothelin A Receptor	Fitzgerald Industries Int.
115	1488	Endothelin A Receptor	Research Diagnostics
117	1598	Calcium-Sensing Receptor (CASR)	Chemicon
117	1598	Calcium-Sensing Receptor (CASR)	DPC Biermann/Acris

121	1681	Follicle Stimulating Hormone Receptor	Biogenesis
121	1681	Follicle Stimulating Hormone Receptor	DPC Biermann/Acris
121	1681	Follicle Stimulating Hormone Receptor	Santa Cruz
125	1762	Galanin Receptor GalR1	Alpha Diagnostic Int.
135	1925	Gonadotropin-Releasing Hormone Receptor	Biocarta
135	1925	Gonadotropin-Releasing Hormone Receptor	Lab Vision Corporation/NeoMarkers
135	1925	Gonadotropin-Releasing Hormone Receptor	Research Diagnostics
135	1925	Gonadotropin-Releasing Hormone Receptor	Santa Cruz
139	1951	Growth Hormone Secretagogue Receptor	Santa Cruz
143	2120	Histamine H1 Receptor	Alpha Diagnostic Int.
143	2120	Histamine H1 Receptor	Chemicon
145	2121	Histamine H2 Receptor	Alpha Diagnostic Int.
145	2121	Histamine H2 Receptor	Chemicon
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Biosource
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Calbiochem
147	2783	Opioid Receptor, kappa 1 (OPRK1)	DPC Biermann/Acris
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Santa Cruz
151	2976	Lysophosphatidic Acid Receptor Edg2	Exalpha Biologicals
155	3057	Melanocortin 3 Receptor (MC3R)	Alpha Diagnostic Int.
155	3057	Melanocortin 3 Receptor (MC3R)	Chemicon
155	3057	Melanocortin 3 Receptor (MC3R)	Research Diagnostics
155	3057	Melanocortin 3 Receptor (MC3R)	Santa Cruz
157	3058	Melanocortin 4 Receptor (MC4R)	Alpha Diagnostic Int.
157	3058	Melanocortin 4 Receptor (MC4R)	Chemicon
157	3058	Melanocortin 4 Receptor (MC4R)	Research Diagnostics
157	3058	Melanocortin 4 Receptor (MC4R)	Santa Cruz
159	3059	Melanocortin 5 Receptor (MC5R)	Alpha Diagnostic Int.
159	3059	Melanocortin 5 Receptor (MC5R)	Chemicon
159	3059	Melanocortin 5 Receptor (MC5R)	Research Diagnostics

159	3059	Melanocortin 5 Receptor (MC5R)	Santa Cruz
161	3061	Melanocortin 1 Receptor (MC1R)	Alpha Diagnostic Int.
161	3061	Melanocortin 1 Receptor (MC1R)	Chemicon
161	3061	Melanocortin 1 Receptor (MC1R)	Research Diagnostics
161	3061	Melanocortin 1 Receptor (MC1R)	Santa Cruz
169	3093	Metabotropic Glutamate Receptor 1	Chemicon
171	3094	Metabotropic Glutamate Receptor 2	Chemicon
173	3095	Metabotropic Glutamate Receptor 3	Chemicon
175	3096	Metabotropic Glutamate Receptor 4	Zymed
177	3097	Metabotropic Glutamate Receptor 5	Chemicon
183	3100	Metabotropic Glutamate Receptor 8	Chemicon
185	3212	Opioid mu-type Receptor	Biosource
185	3212	Opioid mu-type Receptor	Calbiochem
185	3212	Opioid mu-type Receptor	Chemicon
185	3212	Opioid mu-type Receptor	DPC Biermann/Acris
185	3212	Opioid mu-type Receptor	Santa Cruz
187	3223	Muscarinic acetylcholine Receptor M1	Biogenesis
187	3223	Muscarinic acetylcholine Receptor M1	Calbiochem
187	3223	Muscarinic acetylcholine Receptor M1	Chemicon
187	3223	Muscarinic acetylcholine Receptor M1	Santa Cruz
189	3224	Muscarinic acetylcholine Receptor M2	Biogenesis
189	3224	Muscarinic acetylcholine Receptor M2	Calbiochem
189	3224	Muscarinic acetylcholine Receptor M2	Chemicon
189	3224	Muscarinic acetylcholine Receptor M2	Santa Cruz
191	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
192	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
191	3226	Muscarinic acetylcholine Receptor M4	Chemicon
192	3226	Muscarinic acetylcholine Receptor M4	Chemicon
191	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz

192	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz
194	3227	Muscarinic Acetylcholine Receptor M5	Biogenesis
194	3227	Muscarinic Acetylcholine Receptor M5	Santa Cruz
200	3404	Neuropeptide Y Receptor Type 2	Biogenesis
202	3405	Neuropeptide Y Receptor Type 4	Biogenesis
206	3408	Neurotensin Receptor Type 1	Santa Cruz
208	3452	Opiate Receptor-Like 1 (OPRL1)	Santa Cruz
214	3582	Oxytocin Receptor	Santa Cruz
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Chemicon
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Zymed
218	3595	Purinergic Receptor P2Y1	Chemicon
218	3595	Purinergic Receptor P2Y1	Zymed
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Biocarta
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Lab Vision Corporation/NeoMarkers
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Santa Cruz
236	3846	Sphingolipid Receptor Edg1	Exalpa Biologicals
238	3847	Sphingolipid Receptor Edg3	Exalpa Biologicals
240	3848	C-C Chemokine Receptor 9	Research Diagnostics
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemicon
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemokine.com
248	3852	CX3C Chemokine Fractalkine Receptor 1	eBioscience
250	3853	G Protein-Coupled Receptor GPR15	Santa Cruz
264	3860	G Protein-Coupled Receptor SLC/MCH1	Alpha Diagnostic Int.
264	3860	G Protein-Coupled Receptor SLC/MCH1	Santa Cruz
295	3927	Prostaglandin E Receptor EP4	Cayman
299	4051	Proteinase-Activated Receptor 2	Research Diagnostics
299	4051	Proteinase-Activated Receptor 2	Santa Cruz
301	4052	Proteinase-Activated Receptor 3	Research Diagnostics
301	4052	Proteinase-Activated Receptor 3	Santa Cruz
305	4254	Rhodopsin	Biocarta
305	4254	Rhodopsin	DPC Biermann/Acris
311	4480	Somatostatin Receptor Type 1	Santa Cruz

446/448

313	4481	Somatostatin Receptor Type 2	Biogenesis
313	4481	Somatostatin Receptor Type 2	Santa Cruz
315	4482	Somatostatin Receptor Type 3	Santa Cruz
317	4483	Somatostatin Receptor Type 4	Santa Cruz
319	4484	Somatostatin Receptor Type 5	Santa Cruz
321	4552	Tachykinin Receptor 1	Santa Cruz
323	4687	Thrombin Receptor	DPC Biermann/Acris
323	4687	Thrombin Receptor	Research Diagnostics
323	4687	Thrombin Receptor	Santa Cruz
325	4734	Thyrotropin Releasing Hormone Receptor	Santa Cruz
327	4944	Angiotensin II Type 1 Receptor	Alpha Diagnostic Int.
327	4944	Angiotensin II Type 1 Receptor	Biocarta
327	4944	Angiotensin II Type 1 Receptor	Biogenesis
327	4944	Angiotensin II Type 1 Receptor	Capralogics
327	4944	Angiotensin II Type 1 Receptor	Chemicon
327	4944	Angiotensin II Type 1 Receptor	DPC Biermann/Acris
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Lab Vision Corporation/NeoMarkers
327	4944	Angiotensin II Type 1 Receptor	Santa Cruz
329	4946	Angiotensin II Type 2 Receptor	Alpha Diagnostic Int.
329	4946	Angiotensin II Type 2 Receptor	DPC Biermann/Acris
329	4946	Angiotensin II Type 2 Receptor	Santa Cruz
331	5072	Pyrimidinergic Receptor P2Y4	Chemicon
333	5117	Vasopressin V1A Receptor	Chemicon
335	5118	Vasopressin V1B Receptor	Alpha Diagnostic Int.
335	5118	Vasopressin V1B Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Alpha Diagnostic Int.
337	5119	Vasopressin V2 Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Research Diagnostics
347	6031	SIV/HIV Receptor BONZO	Santa Cruz
349	6204	Lysophosphatidic Acid Receptor Edg4	Exalpha Biologicals
351	6213	C-C Chemokine Receptor 5	Calbiochem
351	6213	C-C Chemokine Receptor 5	Capralogics
351	6213	C-C Chemokine Receptor 5	Chemicon
351	6213	C-C Chemokine Receptor 5	Research Diagnostics
351	6213	C-C Chemokine Receptor 5	Santa Cruz
361	6853	Purinergic Receptor P2Y11	Zymed

365	7221	Galanin Receptor GalR2	Alpha Diagnostic Int.
367	7246	Orexin Receptor 1	Alpha Diagnostic Int.
369	7247	Orexin Receptor 2	Alpha Diagnostic Int.
371	8436	Platelet-Activating Factor Receptor	Cayman
371	8436	Platelet-Activating Factor Receptor	Santa Cruz
377	9421	Neuropeptide Y Receptor Type 1	Biogenesis
377	9421	Neuropeptide Y Receptor Type 1	DPC Biermann/Acris
379	9834	Corticotropin releasing factor Receptor 1	Research Diagnostics
379	9834	Corticotropin releasing factor Receptor 1	Santa Cruz
385	14198	Interleukin-8 Receptor B	Biosource
385	14198	Interleukin-8 Receptor B	R&D Systems
385	14198	Interleukin-8 Receptor B	Research Diagnostics
385	14198	Interleukin-8 Receptor B	Santa Cruz
387	14641	Calcitonin Receptor	Santa Cruz
389	16041	C-C Chemokine Receptor 6	Research Diagnostics
389	16041	C-C Chemokine Receptor 6	Santa Cruz
391	16599	Smoothened	Research Diagnostics
391	16599	Smoothened	Santa Cruz
397	17535	Gaba(b) Receptor 1	Alpha Diagnostic Int.
397	17535	Gaba(b) Receptor 1	Calbiochem
397	17535	Gaba(b) Receptor 1	Chemicon
397	17535	Gaba(b) Receptor 1	Santa Cruz
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	Santa Cruz
435	54053	Gaba(b) Receptor 2	Alpha Diagnostic Int.
435	54053	Gaba(b) Receptor 2	Chemicon
439	56923	Muscarinic acetylcholine Receptor M3	Biogenesis
439	56923	Muscarinic acetylcholine Receptor M3	Santa Cruz
457	152201	Thyrotropin Receptor	DPC Biermann/Acris
457	152201	Thyrotropin Receptor	Santa Cruz
459	152245	C-C Chemokine Receptor 2	Research Diagnostics
459	152245	C-C Chemokine Receptor 2	Santa Cruz
461	152299	Interleukin-8 Receptor A	Biosource
462	152299	Interleukin-8 Receptor A	Biosource
461	152299	Interleukin-8 Receptor A	R&D Systems
462	152299	Interleukin-8 Receptor A	R&D Systems
461	152299	Interleukin-8 Receptor A	Research Diagnostics
462	152299	Interleukin-8 Receptor A	Research Diagnostics
461	152299	Interleukin-8 Receptor A	Santa Cruz
462	152299	Interleukin-8 Receptor A	Santa Cruz
468	159973	Vasoactive Intestinal Polypeptide Receptor 1	Exalpa Biologicals
470	160040	Vasoactive Intestinal Polypeptide Receptor 2	Exalpa Biologicals
472	160055	Motilin Receptor (GPR38)	Santa Cruz



448/448

503	160228	T-Cell Death-Associated Gene 8 (GPR65)	Santa Cruz
507	160312	Sphingolipid Receptor Edg5	Exalpha Biologicals
515	160329	Proteinase-Activated Receptor 4	Santa Cruz
535	161214	Galanin Receptor GalR3	Alpha Diagnostic Int.
537	161221	Urotensin-II Receptor (GPR14)	Santa Cruz
546	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Cayman
548	177191	Histamine H3 Receptor	Alpha Diagnostic Int.
548	177191	Histamine H3 Receptor	Chemicon
552	180956	Lysophosphatidic Acid Receptor Edg7	Exalpha Biologicals
562	189900	Sphingolipid Receptor Edg8	Exalpha Biologicals
628	190774	Histamine H4 Receptor	Alpha Diagnostic Int.
628	190774	Histamine H4 Receptor	Chemicon
636	190955	Leukotriene B4 Receptor BLT1	Cayman